THE

MEDICAL AND SURGICAL REPORTER.

No. 1316.] PHILADELPHIA, MAY 20, 1882. [Vol. XLVI.—No. 20.

Original Department.

Communications.

A CLINICAL LECTURE ON IDIOCY AND IMBECILITY.

Joint meeting of the Medical Societies of Delaware and Chester Counties,

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Before introducing to you a number of cases of mental infirmity, all included under the generic term of idiocy, I will touch upon some points preliminary to the study of our cases.

Idiocy is a widely spread and increasing infirmity. Owing to the great reluctance of families to expose to the average census collector the skeletons of their homes, and because of the very imperfect methods adopted, the census statistics are entirely unreliable for any scientific purpose, and we are almost without any sure guide as to the proportion of this class in a community.

The ratio of foreign countries is about as follows: In England 1 to 771 of population; In Scotland 1 to 800 of population; In Sweden 1 to 521 of population.

In the United States the number of idiots, according to the census of 1870, was 24,395, or one idiot or feeble-minded person to every 1376 of population. The great inaccuracy of this return is known to all who have given the subject any attention.

For example: The number of idiots in Illinois, according to the census of 1870, was 1244. A census taken by the Board of Public Charities, in the same year, drawn from correspondence with practicing physicians, made the number 1738; but there were evidences of great unreliability in even the latter: *e. g.*, Cook county, with a population of 350,236, reported no more idiots than Morgan county, with a population of only 28,500. The result of the investigations of the State Board of Charities of Illinois was a published opinion that the number of idiots was greater than the insane, and that the ratio was at least 1 to 867 of the entire population.

If we apply these figures to a few of the States, we have, within their populations, the following numbers of idiots and imbeciles:—

	Population.	*Idiots, etc.*
In Pennsylvania	4,282,786	4939
" New Jersey	1,130,983	1304
" Indiana	1,978,362	2281
" Georgia	1,539,048	1775
" Texas	1,592,574	1836
" Wisconsin	1,315,480	1517
" Michigan	1,636,331	1887
" Maryland	934,632	1078

These aggregates are more than those of the insane, and more than those of the blind and deaf mutes put together.

Are idiots and imbeciles increasing in numbers at a rate greater than that of the general population? An affirmative statement is made to this inquiry, by the Board of Public Charities of Massachusetts; a decidedly contrary and more hopeful view is taken by statisticians of Great Britain; the difference of opinion may result from a growing precision in Massachusetts in the collection of returns, through which cases of idiocy hitherto unreported are finding their place in the returns of later years. Let us now examine the authorities, for a statement of the nature of idiocy and imbecility

Griesinger says the essential character of all idiotic states is weakness of the intellect; the fundamental disorder he makes a weakness of perception.

Seguin, senior, defined idiocy to be a specific infirmity of the cranio-spinal axis, produced by deficiency of nutrition in utero, and in neo-nati.

Ray, adopting Esquirol's classification of insanity, considers this affection as *defective development of the faculties*, as distinguished from lesion of the faculties *subsequent to their development.*

The Superintendents of American Institutions for the Feeble-minded, in their session at Columbus, in 1877, aware of the inadequacy of any definitions of this complex subject, tried to embrace it under this formula.

*"Idiocy and imbecility are conditions in which there is a want of natural or harmonious development of the mental, active and moral powers of the individual affected, usually associated with some visible defect or infirmity of the physical organization, or with functional anomalies, expressed in various forms and degrees of disordered vital action; there is frequently defect or absence of one or more of the special senses, always irregular or uncertain volition and dullness or absence of sensibility and per ception."

The classification of the innumerable forms of idiocy and imbecility is as difficult as a definition. Having recourse to the older authorities on insanity, we encounter variance of opinion, prejudice of statement, and fanciful conceptions, which have affected to a most embarrassing degree the medico-legal literature relating to idiocy and imbecility.

I need but refer to the classification of Hoffbaeur, quoted so largely in Ray, but quoted, too, with the dissent of Esquirol, "that it savors more of the labor of the 'closet,' than of rigid and faithful observation of nature." Indeed, no classification, and no description, can ever be made to fit the subject so accurately as not to omit many individuals and slight some entire groups. Two modern writers—one, Seguin, practical teacher of the idiot, physiologist, metaphysician; the other, Ireland, physician, student, writer—these two offer their classification, in the two unlike but interesting volumes they have published.†

Ireland, the more recent, introduces his classification by saying: "I found it was necessary to have some arrangement in order to say clearly what I wanted to say. Coming to the study of idiocy after having gained some experience in medicine, I have from the beginning viewed it from the standpoint of pathology, and my idea of idiocy is compounded of the following classes, which are generalized from individual, existing idiots, who resemble one another by having the same or similar disease, as they resemble the type of idiocy by having mental deficiency along with a corporal disease:—

1. Genetous idiocy.
2. Microcephalic idiocy.
3. Eclampsic "
4. Epileptic "
5. Hydrocephalic "
6. Paralytic idiocy.
7. Cretinism.
8. Traumatic idiocy.
9. Inflammatory "
10. Idiocy by deprivation.

The faultiness of this classification is evident in the facts, that an individual in any single class may be found in two or more of the other classes, and also that it omits from consideration entirely the essential features of idiocy—the mental deficiency. There is nothing in the mental incompetency of a hydrocephalic idiot, or a paralytic idiot, that is peculiar, one from the other.

But Ireland's classification has a value that should not be lost sight of; it suggests pathological changes or sequences as underlying the infirmity, as no doubt is the case in a great majority of our cases, while it furnishes descriptive titles with certain meanings, for use in writing and illustration

Seguin, the first systematic writer of experience on the subject, assumes that the mental and moral features of idiocy are dependent on conditions of the nervous system, and proposes a classification based upon the seat or location of these underlying physical conditions. "The remote cause or source might be physiological or pathological; the immediate cause was in abnormal conditions, either of the central nervous masses, or in the nervous apparatus radiating from those centres, and which connects them with the individual environments." Proceeding from this, Seguin speaks of the essential forms of idiocy, thus:—

"1st. The chronic affection of a whole or a part of the central nervous masses, which is characterized as *profound idiocy.*

"2d. A partial or total affection of the nervous apparatus, which ramifies through the tissues, and presides over the life of relation, the result of which is *superficial idiocy.*"

He also describes a class of cases, under the head of "backward children," in whom there seems to be a mere *functional torpidity* of the nervous system.

He refers at length to the many maladies with which the different forms of idiocy may be accompanied, speaking of them as *accessory*, and predicating a certain relation between these

* Proceedings of Asso. of Med. Of. of Am. Inst's. F. M. C., p 20. J. B. Lippincott, 18.

† Idiocy: and its Treatment by the Physiological Method. By Edward Seguin, M.D. New York: William Wood & Co.. 1866.

On Idiocy and Imbecility. By William W. Ireland, M.D. Edin. London: J. & A. Churchill, 1877.

accessory maladies and the primitive infirmity itself. Dr. H. B. Wilbur, whose experience has been larger than that of any other observer in this country, is "disposed to leave the subject of classification on this physiological basis, where Dr. Seguin placed it more than thirty years ago."

For the common use of our own institution, I have adopted a simple classification, which denotes the grade of the individual, from a somewhat practical standpoint, and which assigns him at once to his rank and associates.

Following Greisinger, I name two conditions of IDIOCY, the *apathetic* and the *excitable;* and under these have classed as idiots those whose intelligence is so slight that we can detect no reasonable basis on which to give anything more than asylum-care so long as they shall live; that is, subjects for habit training only. Next and higher there is a group which, for a better name, may be called *Idio-Imbeciles.* I recognize three groups of *Imbeciles.* The lowest group, on the confines of idiocy, are susceptible of some culture of the hand and eye, have a slight command of language, sign or vocal, in communicating their desires, and a low degree of attention, imitation, etc. The middle-grade imbeciles are superior to the low grade in the qualities named, while the high or best grade are possessed of all the attributes of intelligence in a limited degree; they are taught to read and write, in some instances fluently; to calculate minor questions of arithmetic, and approach the lower range of common intelligence in their relations to life as found among the ignorant; in their most advanced grade they are lacking only in those powers of discrimination, judgment and will power, the attributes of a sound man; if they exercise them at all it is in mimicry of associates and superiors, rather than from their personal possession.

Another class of imbecile children is now very distinctly recognized as an increasing product of the excesses and abnormalities of civilization. They may be found more commonly the subjects of neglect, born or drifting into our Almshouses, or quite frequently in the Refuges, where they are sentenced for incorrigible behavior or petty crime. Under the designation of "moral idiots," they figure in some of the works on Insanity; called so because, in many, the perversion seems to be mainly in the display of criminal or vicious intent, without responsibility, or without will power to control the impulse. There is usually a history of family eccentricity, or partial insanity, back of the child. They are denominated cases of Juvenile Insanity.

Such, then, is the simple classification adopted in this Institution.

I. Idiocy. (*a*) Apathetic; (*b*) Excitable.

II. Idio-imbeciles.

III. Imbecility. (*a*) Lower grade; (*b*) Middle grade; (*c*) High grade.

IV. Juvenile Insanity.

I will now present for your observation a number of cases, and in their description will make use of the three classifications I have cited; that of Ireland, pathological; that of Seguin, physiological: and that which rules this Institution in our domestic management of three hundred and fifty inmates. The facts of etiology and treatment will be related as they bear upon individual cases brought before you. The first group of cases I present are those under the denomination of,

Apathetic Idiocy.—The type of the class is this helpless, gelatinoid creature, Willie F., 10 years of age, so limp and structureless that, in the language of the nurse, "he doubles in three, like a clothes horse, when lifted from his bed." The only noise that interests him is that of a bell; the only object he ever seems to look at is his hand; he cries when he is hungry; he enjoys being held and rocked; and shows actual delight when bathed; with his great, luminous, soft jet eyes, he reminds one of a seal; perhaps his intelligence is rather below that of a trained seal; it is certainly not that of a babe four weeks old. He is a profound, genetous idiot, with epileptic complication. The oldest sister is deaf and dumb; the second sister is an epileptic; the third child is an idiot of precisely the same grade as this, and is now in our Asylum department; this is the fourth child of the family; both idiots were born club-footed. Four children, all males, died under 17 months of age, and there are younger children, of whom it is alleged that they are weak-minded. Acute phthisis arrested the mother at 41, and put an end to this fearful line of idiocy. Phthisis seems to have existed in the family, and whatever other tendencies to blood degradation there may have been, were intensified by a union in marriage of first cousins. The father is a man of low intelligence, neurotic, and of small stature.

Edith B., aged 10; mute; dwarf; helpless; actuates nothing; her only expression of common wants is a low moan or cry; she rewards the faithful nurse by a smile, and recognizes the epithet "baby," which has been applied to her; she sleeps well, and enjoys a bath; she has passed through critical sicknesses.

Willie, aged 3½; of stronger physique than the others, with excellent teeth, and sensory

perceptions more alert; it is fair to hope that this child may develop under the favorable circumstances of his present surroundings. The child had convulsions during the first six weeks of his life. There is a suspicion of venereal taint in the father's history, who is of consumptive lineage and an invalid. The mother is a faithful domestic, below average intelligence, and had severe convulsions in her infancy.

Ida H., aged 21; genetous, apathetic and dwarf idiot, of a better grade than the three preceding cases; but there is extreme vacuity of intelligence, and absence of any self-hood; utters a few words, and formerly sang snatches of tunes; indeed, tune is not infrequently found in idiots, even of this grade; one whose intelligence is not higher than Ida's has been found automatically singing the difficult passages of L'Africaine, after hearing the music practiced but a few times in a hall of these buildings, quite remote from where she was sitting.

The history of this dwarf is a gross page in etiology. I will quote from a correspondent: "This is the fifth child; the oldest two are sound in mind, but of highly nervous temperament; one sister is deaf and dumb; one brother weak-minded; three died in infancy—one of epilepsy, one was still born, and one died of diarrhœa. The mother and four of her brothers and sisters were all choreic; also the mother's mother; chorea, of a grave character can be traced far back in the mother's ancestry; the mother was an invalid all her married life."

Idiocy, Excitable.—Asher C., æt. 26. Some years ago application was made for the admission of Asher, by a western physician. He thus described him: "He is exceedingly repulsive; in appearance and actions more like a gorilla than a human being; he is kept in a yard or pen, where he runs about in a naked condition; every article of clothing he tears and throws to the hogs. His mental condition seems almost a blank; he has never spoken a word, and his temper is sudden and violent."

We admitted Asher, and believing him to be human, endeavored to make him realize it also; swings, ladders, etc., were used in various ways, as a means of diversion and employment. At first the tearing of clothes was of daily occurrence. Now he seldom tears anything if it be in good condition, but if a button be found off, or a seam ripped, he tears the garment to shreds. He can talk well enough to be understood by any one who is accustomed to him, and will never go to bed without kneeling beside his attendant and going through his form of prayer, the language of which is incomprehensible to the bystander, but his devotion, nevertheless, is touching. He is very helpful in the morning, dressing the smaller and weaker boys of the Asylum with surprising rapidity and dexterity, and is as particular about their garments as about his own; he will never dress a boy in anything that has not all the buttons properly sewed on. He particularly enjoys braiding seven strands of manilla rope for mats, an exercise introduced for the benefit of the lower grade of Asylum inmates. Asher is liable at any time to relapse, and if not under vigilant care, would, in a week, be the "gorilla" described by his family physician.

In the background of many of these cases of excitable idiocy is a family tendency to insanity, and the pathological condition of this sad creature is doubtless that of chronic mania.

When three weeks old Asher had continuous spasms; at four months "was afflicted with head dropsy, and was very low for three weeks; after his recovery was strong physically. There are two brothers and one sister living, who in body and mind have no constitutional peculiarities. A fifth child died of cholera infantum at four months.

"On the father's side there was a great deal of neuralgia and sick headache, on the mother's side paralysis. The grandparents on both sides were addicted to tobacco in excess, and on the father's side to alcoholic excess, as well. The father was addicted moderately to alcoholic drinks, and both parents to tobacco. The father had always been subject to neuralgia, sick headache, and nervousness, was of a very melancholy nature, and though successful in his business and domestic relations, commited suicide in a fit of despondency.

I will call your attention briefly to a few additional cases of excitable idiocy, each illustrative of certain points in this study. Amie F., aged 8 years, mute, wild and vicious, biting any one she can reach, with a chronic nervousness in the act that suggests its irresponsibility. She bit her mother from the time she was conceived; an unwilling and unhappy conception, which the mother admits to have made every effort to abort. A light-headed father, who had run his career of licentiousness, a simple-minded mother, and the unrest of Amie's fœtal life, are circumstances testifying to this sequence; a genetous, excitable idiot.

C. B., aged 20 years, is readily defined as a typical microcephalic idiot, who, but for the discipline she is under, and to which she happily

and easily submits, would be of the excitable variety, destructive, noisy and troublesome.

The cranial measurements are as follows: Fronto-occipital diameter, 5¾ inches; transverse diameter, 4½ inches; greatest circumference, 16 inches.

(To be Continued.)

MARTIN'S BANDAGE IN THE TREATMENT OF FRACTURE OF THE PATELLA.

BY WILLLAM A. BYRD, M.D.,
Of Quincy, Illinois.

Judging from the number of methods devised for the treatment of fracture of the patella that have been published, one must conclude that it is one of the most difficult fractures to treat of all that occur to the osseous framework of the human body. It has been my good fortune to see but few such accidents, and to have the sole treatment of but one. In May, 1876, I published an account, in the New York *Medical Journal*, of, I believe, the first case treated by suture. It was treated successfully by the late Dr. Geo. McClellan, of Philadelphia. I quoted it to condemn it, and it has been quoted by Dr. Hamilton, in his treatise upon "Fractures and Dislocations," sixth edition, in these words: "Dr. Byrd, of Quincy, Ill., says that he had, as early as May, 1876, in the New York *Medical Journal*, called attention to the fact that Dr. Geo. McClellan, of Philadelphia, had made the same operation, only without the carbolic spray, many years ago; but I do not think we need to feel ambitious to establish for ourselves a priority of claim in this matter." During last summer, I witnessed the treatment of this fracture by the silver wire ligature, in one of the largest and best hospitals in London, the operation being done by a most expert operator, with assistants whose reputation was world-wide, and I must say, that after seeing the operation, I have a worse opinion than ever of it. The treatment by Malgaigne's hooks is only less barbarous; and of most of the other methods that have been devised, they are tedious, painful, and uncertain in their results. Perhaps this can be said in a less degree of Dr. Hamilton's method than any other. His method I had decided upon adopting, and the reasons for varying from it will appear in the following history of a case:—

January 9th, 1882, I was called to see Henry Meyer, an athletic laborer, aged 28 years, who was said to have received a sprain of the knee. When I saw him, I found that, while out hunting, his foot had slipped, and in his endeavor to regain his equilibrium, the right patella was fractured at the junction of the middle and lower third. The fragments were separated sufficiently to admit the thumb being placed between them. There was considerable effusion into the joint, with great pain. Not being able to get a leather or shellac-cloth splint at the time, I took an inch-thick pine board, that would extend from the sub-gluteal fold to below the heel, and so shaped it that it was about as wide as the greatest diameter of the leg, except just opposite the joint, where I made projections, so that the bandage, passing around the limb and splint, would exert traction upon the fragments in such a manner as to draw them together (see the cut in Dr. Hamilton's "Fractures and Dislocations," sixth edition, p. 523) and not slip. The splint was well padded, so as to fit the limb comfortably, and the bandage was applied as on page quoted above; "a roller, made of unglazed cotton cloth, is then turned around the leg and splint to within about three inches of the knee, and another from the upper end of the splint, over the splint and thigh, to within three inches of the knee. While an assistant approximates the fragments with his fingers, the surgeon makes two or three turns with a third roller around the limb and splint, close above the knee; after which the roller descends below the knee, and an equal number of circular turns are made close below the lower fragment of the patella; and finally, a succession of oblique and circular turns are made above and below the fragments, which turns are to approach each other in front until the whole of the patella is covered, the last turns being again circular. The dressing now being completed, the rollers are carefully stitched to the cover of the splint, through its whole length, on both sides, and the limb is left supported in the elevated position by a suspending apparatus, or by some other mode which will insure its maintenance in this position." I quote the above for the reader to understand that all Dr. Hamilton's details were carried out, with the exception of the substitution of a pine board for a splint, instead of shellac cloth. This treatment was kept up for a week, but the effusion and swelling not diminishing, I applied a Martin's rubber bandage, instead of the cotton one, from the ankle to the gluteal fold, expecting to get absorption of the effused fluid, and also by the constant elastic pressure to overcome any tendency to spasm in the quadriceps muscle. I had intended to remove the fluid from within the joint, with the aspirator, before applying the bandage, but having removed the bandage from another patient just before calling to see this one, and not having the aspirator with me, I

concluded to apply the bandage, as I had it with me, and if necessary aspirate the next day. When I came to see him the next day the swelling had subsided so much, and he was feeling so comfortable, that I decided not to aspirate. From this time on he made a speedy recovery. At the end of nine weeks I let him get upon his crutches, and to day he walks well on the limb, although there is yet considerable stiffness of the joint. The union is so intimate that it is with the greatest difficulty that the site of the fracture can be made out.

I do not know but that the board splint could be replaced, with advantage to the patient, by one of shellac or of plaster-of-paris, allowing the patient to go upon his crutches at once, applied to the posterior half of the leg, as suggested by Dr. Hamilton. The shellac, on account of its weight, would, of course, be the best. In using the india-rubber bandage it should be taken off at least once a day, and the limb washed, to clean off accumulated epithelial scales and perspiration; the bandage should then be washed dry and re-applied. There can be but little doubt that a great deal if not the whole of the displacement of the fragments is owing to the effusion within the joint, and it would be a good and safe practice to aspirate before applying the bandage; for my views in regard to aspiration of joints I refer the reader to the Baltimore *Independent Practitioner* for September, 1880, or to a very valuable paper by Dr. Wm. Judkins, of Cincinnati, Ohio, published in the New York *Medical Record*, April 8th, 1882.

I really am not sure but that excellent results might be obtained by the treatment of fracture of the patella by the use of Martin's bandage, unaided by any splint, as the elastic pressure, if properly applied, would keep down swelling, and keep the fragments in perfect apposition, if the patient could keep from flexing the leg during both waking and sleeping hours. For fear some one may think I am claiming too much originality in this matter, I will say that to some extent it was foreshadowed by Dr. Edward Borck, of St. Louis, at the last meeting of the Tri-States Medical Society, in that city, in remarks published in the St. Louis *Medical and Surgical Journal*, for January, 1882, upon "Fractures of the Radius; Treatment by Rubber Bandage." These remarks I heard, and Dr. Hamilton himself strikes the key-note of the treatment when he says, in "Fractures and Dislocations," sixth edition, p. 528, "The cotton cloth roller is preferred, especially for the purpose of approximating the fragments, because, if unglazed it yields a little, and adapts itself smoothly to the skin, even sinking down a little just above and below the patella, thus rendering it less liable to slide over. Reversed turns are omitted altogether, because they cause sharp cords where they are folded, and sometimes produce painful constrictions and excoriations." All these reasons apply with more force to the india-rubber bandage. My thanks are due Drs. G. W. Connell and J. B. Shawgo, and Mr. Alexander F. Lee, for their efficient assistance in the treatment of the case.

A CASE OF CHRONIC HYDROCEPHALUS.

BY D. A. HENGST, M.D.,
Of Pittsburg, Pa.

Willie H., aged 11 years, came under my observation in the winter of 1879, with the following history: "Had been a bright and healthy child until the age of two years, when he had an attack of brain fever, lasting about one month, during which time he had several severe convulsions. After this he seemed apparently well until the age of three years, when he had a moderately severe attack of typhoid fever, accompanied by delirium; this attack lasted about four weeks, after which he was in good health for about one year. When about the age of four years, he began to have tremors of the hands and legs, pain in the feet, stiffening gait, feet became stiff, swollen, and sensibility greatly impaired, and could not bring his hands to his mouth. His intellectual faculties at this time were not impaired, but now his head began to enlarge, face broad and aged-looking, eyes sunken, and forehead protruding; he would sit with his head between his knees. From now on he gradually grew worse, and at the age of five years had to be in bed constantly, his head enlarging and the body emaciating, his appetite most of the time being good and bowels regular, but he had no control of his bladder, and there was almost a constant dribbling of urine.

At seven years of age he had convulsions for several days, and after that, at longer and shorter intervals, until his death, which occurred about one month ago.

Three years ago, when I first saw him, his head measured twenty-one inches, in its antero-occipital circumference; body a mere skeleton, with considerable muscular contraction, the forearms being firmly flexed upon the arms, and the feet greatly everted; these contractions increased so that at the time of his death both hip joints were dislocated downward and forward, into the thyroid foramen.

During the six years that he was constantly

confined to bed he also had annoying and troublesome bed-sores, which, on account of the incontinence of the urine, it was impossible to prevent.

The special senses, with the exception of sight, which was very weak, were not impaired. During the last two years of his life the mental faculties were very weak.

After death, which occurred during a convulsion, the post-mortem examination revealed the following state of affairs: Post-mortem rigidity slightly marked; emaciation extreme; length of body forty-five inches, length of legs twenty-four inches, weight of the entire body about twenty-five pounds; circumference of the head, antero-occipital twenty-three inches, biparietal fourteen inches, from root of the nose to the occipital protuberance fourteen inches. On examination of the head found the scalp thin and no subcutaneous tissue; average thickness of the skull about one-tenth of an inch; membranes very tough and firmly adherent to the skull, but not at all to the brain substance. The lateral ventricles were enormously distended and found to contain about fifty ounces of a clear, serous fluid. The brain substance formed a sack varying in thickness from an eighth to half an inch, and was pale and anæmic in appearance; the convolutions and sulci being nearly effaced by the pressure of the fluid. At the base of the brain and in front of the pons varolii was found a tumor about the size of a walnut; it seemed to be attached to the crura cerebri and form part of the floor of the lateral ventricles.

This tumor was examined by my friend, Dr. J. M. Stevenson, of this city, and by him pronounced to be a glioma. The question is, was this tumor a subsequent growth, or did it start about the time the child had the alleged attack of brain fever, at the age of two years?

The nervous symptoms manifested before the enlargement of the head would seem to indicate that the tumor was the primary trouble, and the hydrocephalus produced by the interference with the circulation through the lateral ventricles of the brain.

The treatment in a case like this, of course, amounts to nothing; only palliative measures could be used, and that only for acute symptoms as they arose from time to time.

Cases of hydrocephalus are on record which were said to have been cured, but it is doubtful if they were cured. The duration of this case, nine years, is certainly a long time, the average duration being from two to three years, but cases are reported which have continued even longer than this.

A CASE OF RUPTURE OF THE UTERUS.

Reported at the meeting of Burlington County, New Jersey, Medical Society,

BY W. L. MARTIN, M.D.,

Of Rancocas, N. J.

On the morning of the 15th of fifth month last, I was summoned to attend E. F., aged 31, in what was to be her third confinement. Arriving about 9.30, I found labor progressing naturally; pains coming on rapidly; head beginning to engage in superior strait; os nearly dilated. After waiting considerable time, and the case making slow progress, I gave 30 drops of fl. ext. ergot, feeling that labor had sufficiently advanced at this time to make use of this means to stimulate uterine effort. At a suitable time after this ruptured membranes, and awhile after I gave 30 drops more of ergot, when labor set in with much more vigor than heretofore. When all seemed thus to be going on satisfactorily, and was bidding fair to be soon over, as the head was about to engage in soft parts, there came a complete cessation of all pains. The woman lying in this condition so long, excited my fears that something was wrong, which, upon examination, proved to be the case, as there was found to be a large laceration beginning at the os and extending up into the body of the uterus on the right side. This plainly accounted for the complete cessation of uterine contractions, for in this condition it would be impossible to have contractions of the uterus. Feeling now that the child would have to be delivered without any assistance from the mother, I therefore, through a great deal of persuasion (she having a great dread of instruments), applied my forceps and made every effort my strength would allow, without accomplishing much. Finding the instruments were losing their grasp of the head, I removed them, expecting to apply them again better. But with all the persuasion I could command she would not submit to have them applied again. Knowing now that chloroform or ether would have to be given, I directed the husband to send to Moorestown for an assistant, while I, in the meantime, went home, about two miles away, to come again when the assistant arrived.

About 7 P.M. Dr. T. met me and confirmed my diagnosis of the case. I, therefore, asked him to apply his forceps while I etherized the patient. After she was thus completely insensible to pain, Dr. T. applied his instruments and used all his strength for a considerable length of time, when the forceps slipped from the grasp of the head. A second and third time, with the handles of the instrument bound together with a cord, the

same thing occurred. Becoming exhausted with continued effort, he asked me to change positions with him. I did so, and applied my forceps with no better success than before. So throwing the forceps aside, I turned the child and delivered it very easily in this way.* The placenta was removed immediately after. To prevent a hemorrhage we injected a large dose of ergot into arm. Not an alarming amount of hemorrhage occurred. I gave quinia and opium, combined with other appropriate directions for the night, and left at 10 P.M., when pulse was 120 per minute, small and thready.

16th, 7.30 A.M. Pulse 88, with nausea and vomiting, which had been kept up through the night; but I suppose this was partly due to the anæsthetic. No medicine was retained through the night. I gave oxalate of cerium, and applied sinapisms over the region of the stomach, to control nausea, afterwards subnitrate of bismuth, with other minor things, but still vomiting continued, and nothing retained. 5 P.M. Pulse 80; no pain, but tenderness. Still to give pill of quinine and opium if could be retained.

17th, 7 A M. Pulse 84; no pain; still vomiting. 5 P.M. Pulse 100; considerable pain and somewhat swollen and tympanitic; pill not retained. Injected very near ⅔ grain of acetate of morphia in arm; ordered turpentine to be applied externally, on piece of flannel, also verat. viride to be given, and the parts to be cleansed with tepid water.

18th, 7.30 A.M. Pulse 72, full and soft; had a good night; no pain, but no difference in swelling of abdomen; gave pill, quinine and opium; continued turpentine, and water injection. 4.15 P.M. Pulse 108; pain came on about two hours ago; vomited again, the first time since last evening; injected ⅓ grain of morphia; continued turpentine, pills and verat. viride.

19th, A M. Pulse 108; began to vomit again at 5 A.M.; was vomiting when I entered the room; bowels moved some little; had a restless night, especially the latter part of it; same treatment continued, with injection of morphia. 7 P.M. Pulse 104; did not vomit after my visit in the morning until 1 P.M.; continued to vomit during the afternoon; injected morphia; gave calomel with soda; applied blister to abdomen.

20th, A.M. Pulse 100: full; vomiting since 1 o'clock, but as soon as blister drew, nausea and vomiting ceased entirely; bowels were moved freely with calomel; sent for Doctor to meet me; we met at 9 o'clock. He suggested carbolic acid being added to vaginal injection, and the patient to assume the upright position in bed for a few minutes, to favor lochia; other treatment continued as heretofore. 7 P.M. Pulse 96; retains nourishment this evening; same treatment continued.

21st, A.M. Pulse 96; had a good night; breast beginning to enlarge; tympanites about the same. 6.30 P.M. Pulse 104; takes nourishment, eggs, etc.; breast very full.

This ends my notes in the case; but I would state, she gradually continued to convalesce, on from this time, and in about six weeks was out, and now, as I see her, when passing along the road by her premises, attending to her household duties as heretofore, she seems in vigorous health.

I have spoken somewhat in detail in reference to the management of this case in the beginning and from day to-day, believing that such cases can be more clearly presented to view in this way than in any other.

* There were no signs of life in the child.

PROCIDENTIA, WITH RIGIDITY OF THE OS, AS A CAUSE OF DEATH IN LABOR.

BY A. SHIMONER, M.D.,
Of Horicon, Wis.

On the 17th of January last I was called by Dr. Halleck, of Juneau, to assist him in a difficult case of confinement.

Upon my arrival the doctor gave me the following history of the case:—

The lady is about thirty-four years of age; primipara; has enjoyed fair health before pregnancy; was married two years ago. I first saw her on the 27th of September last, on account of inability to micturate, complaining of much pain in the abdomen, and unable to keep the erect posture. Upon examination I discovered an enlargement of the abdomen. Proceeding to draw off her urine, I, to my great surprise, felt a large tumor between her thighs, which, upon closer inspection, proved to be the pregnant uterus prolapsed. It protruded about six inches, was about two inches across the os, and about five inches at the fundus. With little difficulty I replaced it, in about ten minutes, after which she got up and passed considerable water, without any difficulty, and felt well till the uterus again prolapsed. From that time up to her labor I replaced the womb five times; at one time it prolapsed down to the knees, carrying down the vagina and bladder. I tried to keep her in bed, but she would get up, in spite of all I would say; would do her housework, running up and down a flight of stairs.

She was taken with abdominal pains on the

10th of January; the pains were not characteristic of uterine contractions. Upon examination, the os was closed, the neck and os were very large and hard; in this condition she remained up to the 15th, during which time she took very little nourishment. The next morning, at three P.M., the os was dilated to about the size of a silver five-cent piece, when she was taken with severe vomiting.

When I arrived, the next afternoon, I found the lady lying on her right side; she was unable to turn on her back, on account of abdominal pain; was very much exhausted, vomiting every minute; pulse was feeble and respiration was accelerated; abdomen was very tender; the child could not be felt through the abdominal walls; the fœtal heart and placental souffle could not be heard; the diameters, both external and internal, of the pelvis were normal; the uterus was low down; the vaginal portion was large and hard; the os could be felt in the centre of the hard lump, and was dilated to about the size of a silver quarter dollar; the head presented, and was at the superior strait. The uterine pains were few and insignificant, but she had a continuous abdominal pain and great tenderness. We gave her an anodyne and stimulants per mouth, but they were rejected. We watched her closely till next morning, but could not perceive any change in the os. Her condition became very critical; exhaustion increased, pulse became more feeble, respiration was more difficult, and vomiting kept on. Seeing that her only hope of recovery was the termination of labor, we came to the conclusion of so doing; but the question arose, what form of operation is here admissible, as the uterine ligaments were totally relaxed, the os too small and very rigid. Thinking that if the size of the fœtal head was diminished sufficiently to enter the os, and with the aid of the anæsthetic it would dilate by gradually drawing it through, I proceeded to perforate the head with Braun's perforator; this I did easily, but then arose the difficulty in applying the cranioclast (Braun's), but after a considerable work I managed to apply it well; when I commenced traction the head elongated, entered the os partly, and was there arrested; the uterus began to descend and had to be held back; the os would not dilate a particle; on account of the softness of the dead child's cranium the bones gave away, and I had to apply the instrument the second time. Seeing the great rigidity of the os, I made two incisions with scissors, which grated like cartilage or scirrhus, and was as tough as leather; even this procedure did no good, and I resorted to a number more, but without avail, as the cranioclast tore the parietal bone, and became loosened. I next tried to produce version, but could not introduce my hand through the os; after enlarging the incisions, which were five or six in number, I managed to grasp the foot, but turning was impossible. Finally, after working hard for about one and a half hours, I succeeded in getting a good hold of the remains of the skull with the cranioclast, made two more incisions, and delivered the child. The placenta was delivered without any trouble, and hemorrhage was slight. The uterus contracted only partially. We immediately washed out the cavity of the uterus with a weak solution of carbolic acid. We gave her stimulants per mouth and hypodermically, but her pulse would not become any stronger, being, as it was before the operation, very feeble and frequent. She regained her consciousness, after the effects of the anæsthetic passed off. But about one hour after the operation she began to sink; pulse became weak, at times imperceptible, extremities cold, and in that condition she expired in a short time.

The afternoon I arrived, I ordered hot baths, but as there was nothing in the house in which it could be given, it was neglected, and I doubt the efficacy of any form of treatment, with exception of incisions, in a case like this. I cannot recall to my mind another similar case, not even similar in disagreeableness, out of about 3000 cases, while at the lying-in department of Prague, Austria. It is fortunate that such confinements are rare.

Hospital Reports.

HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

CLINIC OF WM. GOODELL, M.D.,
Professor of Clinical Gynæcology in the University of Pennsylvania.

Reported by Wm. H. Morrison, M.D.

LARGE OVARIAN CYST; DYSMENORRHŒA FROM ANTEFLEXION OF THE WOMB; DILATATION; PROLAPSE OF THE OVARY; HYSTERICAL ATTACKS; TREATMENT OF HYSTERIA.

Gentlemen: As this is my last lecture, and I shall not have an opportunity of bringing before you the patient on whom I operated for ovarian tumor last Saturday, I have brought the cyst, and shall say a few words in regard to her condition.

You will remember that on last Wednesday I showed her to you, and I told you that from her appearance I judged that the tumor would weigh somewhere from 90 to 100 pounds, and that I estimated her weight at 80 pounds. I was very nearly correct. The cyst weighed 16 pounds,

and the fluid inside of the cyst weighed 96 pounds, making a total of 112 pounds. The woman, after the operation, weighed 72 pounds. The operation began at 1.15 P.M., and was over at 2.25 P.M. That evening the temperature ran up to 100.4°. The next day it was over 100°, but since then it has not been up to 100°. It has gone up in the evening to 99.8° and down in the morning to 98.6°. Last evening the temperature did not rise to 99.8° but staid at 98.6°. This morning it is 98.4°. She has a good appetite. I feel a strong conviction that she is going to get well.

The treatment was absolute diet for thirty-six hours. As the tumor had reduced her weight to 72 pounds, I did not wait for forty-eight hours to elapse before administering food. I began with milk; at first a teaspoonful, then a dessert-spoonful, then a tablespoonful, and then half a cupful of milk with bread. To-day she is taking eggs, toasted bread and milk.

The diagnosis that I made last week was correct. There was a large mother cyst with a number of small child cysts. Here is the cyst with many of the child cysts still unopened. That is the largest tumor I have ever seen.

I have thought the question over very carefully, whether or not I did right in operating. The operation turned out all right; but that is not the point. Trying to decide what was the best thing to do in this case kept me from having a good night's rest. I think it would have been wiser for me to have aspirated, waited until the cyst began to refill and then have performed the operation. These are my reasons: The extent of the surface of peritoneum exposed was something astonishing; and as you all know, the peritoneum is very vulnerable. Then there were enormous blood vessels which, I think, would have been reduced in size by aspiration. The only really good argument to my mind against aspirating was the one which I mentioned to you; that is, I was afraid that the cyst would refill with a highly albuminous fluid, at the rate of two pounds a day, which would have reduced her very rapidly. I have seen smaller cysts fill up at the rate of over a pound per day.

This is my first experience with enormous tumors. I have weighed them at 66½ lbs., and in one case we estimated the weight at 70 lbs. Although this tumor was so large, it caused no pain whatever. This is characteristic of ovarian tumors. It simply annoyed her by its weight. She was able to have her bowels moved without much trouble, and had a pretty fine appetite. When she sat down on a chair, she was tolerably comfortable. She has been unable to lie on her back for several months. I did not dare to give ether while she was on her back. I think that she would have died, if I had attempted to do so. I operated with her on her left side, and reached over and made the incision. The abdominal adhesions were pretty firm, but there were no other adhesions, and the stalk was not very large. I consider this by no means a difficult operation. I have frequently had smaller tumors which gave me much more trouble. After the operation, I could almost have wrapped the folds of skin around her body. Her girth previous to the operation was 61½ inches. The skin is very elastic, and has contracted a great deal, still there is a large cavity.

I presume that I shall get union by the first intention, as I almost always do in these cases. I am a firm believer in the antiseptic dressing. When I used to close up these wounds with wire, without the antiseptic dressing, the wires were always tarnished and black; but when I used wire and the antiseptic dressing, they were just as bright at the time of removal as when they were inserted. That is, to me, a strong argument in favor of the antiseptic dressing. I now use silk instead of wire, but I never have any pus. When a drainage tube is used, we get a little pus at the lower stitches which come near the drainage tube.

Dysmenorrhœa from Anteflexion of the Womb; Dilatation.

The first patient whom I shall bring before you is a woman who has, at her monthlies, suffered the tortures of the damned. She has a very perplexing condition of the cervix. She has a sickle-shaped cervix projecting into the vagina, the vaginal portion of the cervix being the one most bent. Theoretically, there is no doubt that the cutting or bloody operation, as it is termed, is the best one for the relief of this condition. In this operation the posterior wall of the cervix is slit down; a knife is then passed into the womb, cutting the angle which is higher up. This is an operation which I dislike to perform. "The burnt child dreads the fire." As I have told you on a previous occasion, I got badly burnt in performing this operation, having lost a most estimable lady by it. It is an operation with risk, and I never like to perform it unless I feel a firm conviction that it is necessary.

I have the woman under ether, and shall now examine her. I have come prepared to do the cutting operation, but I may simply dilate the cervical canal. Dilatation has been employed in this case a year ago, but it was done without ether, and under such circumstances it must be always imperfectly done. I remove this ring pessary, which I did not put in; she had it when she came to my office last week. She has a retroversion of an anteflexed womb; an anteflexed womb retroverted. What is the meaning of that? Gentlemen of the third year will all understand it. The womb is bent on itself and has not straightened itself, but has bodily fallen over backward, still keeping the anteflexed condition. A retroversion of the anteflexed womb, which means that there is prolapse of the anteflexed womb.

I shall now introduce the sound and see if I can get past the bend. I pass it by what I call the "master's turn," what the French call, applying the phrase to the passage of the catheter, the "*tour de maître*." I pass the sound as far as it will go with the curve posterior, then rotate my hand and depress the handle, and the sound passes into the cavity. The womb measures three inches. This makes me think that forcible dilatation may be successful.

I shall now proceed to dilate. This can be done without the use of the speculum, but it is safer to see what you are doing. This lady is very anxious to have children. She has to work

hard, but at her monthlies she has to go to bed and use morphia by hypodermic injection. I can recommend this operation of dilatation to you with great confidence. As I have said to you on previous occasions, this is rough in appearance, but I cannot recollect any serious inflammation result from it. Occasionally I have had some inflammation, but in these cases it resulted from imprudence on the part of the patient. In doing this operation I use two dilators. The smaller (Eillenger's) is sure to pave the way for the larger and stronger one (Wilson's). The operation can be done with one, but two are better.

Sometimes, in a badly anteflexed womb, you cannot get the dilator beyond the internal os. I worked away for a long time before I hit upon a plan for overcoming this difficulty. The way to do it is this: Take a surgeon's probe, make a sharp turn at the end, so as to pass the bend, then pass that into the womb until the end reaches the fundus. The straight part of the probe now occupies the neck of the womb, compelling it to become straight. You can now introduce the dilator by the side of the probe and then remove the probe. I remember sweating for an hour and a half over a case up town, trying to get this instrument in, and then I only succeeded by using the probe. I now pass the dilator as far as it will go and dilate to a certain point. I remove it and insert it a little further, and so work my way into the cavity of the womb. Having passed the internal os I substitute the larger instrument. It goes in without difficulty.

I cannot promise you that you are going to cure every case, but I can promise you that you will cure the majority, and those who are not cured will be greatly improved. The history is this: you perform the operation, and the woman, at her next monthly, has a great deal of pain and disturbance, for the womb has been bruised, some of the fibres have been torn, and we get, I believe, a fissure, which does not heal at once. It is well to tell the woman that at her first monthly she may have a great deal of trouble, but at the second period she will be surprised at the absence of pain. For a number of months she may go on with ease, and during that time she may become pregnant. That will cure her trouble. After several months have passed she may begin again to have dysmenorrhœa, but I do not recollect a case in which it was as bad as before the operation. I have in some cases been obliged to dilate more than once.

What are the dangers of this operation? If the dilator does not have a shoulder to prevent it from going more than two and a half inches, it may impinge on the fundus and you tear a hole in the womb. I feel satisfied that on two occasions I have torn the womb at the internal os, because, while screwing the handles together, something suddenly gave way, and I had not the slightest difficulty in bringing the handles together. Each of these cases was a great success. Of course, I kept everything to myself, but I watched those cases very closely. I think that while I tore the womb at the internal os, I did not tear the peritoneum, which is elastic, and this prevented any communication with the peritoneal cavity.

My rule is to take away the ether after having dilated the canal and allow the instrument to remain until the woman begins to move and squirm, showing that she feels it. Just before I begin to dilate I slip into the rectum a suppository containing gr. j. of the aqueous extract of opium. The operation requires from fifteen to twenty minutes. The opium will then be commencing to act. I tell the nurse, if the woman suffers much, to use a second suppository at the end of an hour, or better, if she can postpone it that long, at the end of two hours. This is usually the limit to the suppositories. I rarely get along with one. I keep the patient in bed until the soreness leaves her. This evening, as she gets rid of the effects of the opium, she will complain of soreness in the abdomen, and also, perhaps, in the back. If the soreness increases, and the abdomen becomes tender, I lay a poultice over the abdomen, and increase the number of the suppositories, making the number depend upon the amount of pain. The rule is to make her as comfortable as possible, for I firmly believe that opium is one of the best antiphlogistics, especially in pelvic surgery, and that by keeping pain under, we keep inflammation under. If she has a nurse I advise carbolized injections twice daily. I do so for the following reason: As the patient is lying in bed, there will be a little oozing of blood, which will collect in the vagina, form clots, and may become offensive. I never like to have anything offensive in the neighborhood of a newly formed wound; but in this operation there is not much danger of absorption, for in twenty-four hours the little lacerations will granulate, and granulating surfaces absorb only to a limited extent, consequently there is little danger of the absorption of blood, for this does not decompose until at least twenty-four hours have passed. I have occasionally, in an old womb that has been treated by nitrate of silver, made a slight tear of the external os. In performing this operation on one of my patients, a lady in every sense of the word, I made a considerable tear on the right side. She lived at some distance from the city, so I told her that when she went home she should say to her physician, that "I requested you to tell him that I had torn the os in dilating." I was afraid that he might think that she had had a child. If I should examine a woman, who alleged herself to be a virgin, and found such a tear, I should say that she had given birth to a child.

That reminds me of the case of an Irish girl, on whom I operated some three years ago, and removed a large fibroid tumor. It was very large, weighing over a pound. It was so large that I had to divide the perineum on each side to deliver the tumor, but in spite of all, the perineum was torn down almost to the sphincter. I had to put stitches in the perineum and on both sides of it. When she went home there was such a buzz among the old ladies, and from them it extended to the young ones, in her class of life, that I was compelled to write a certificate of her virginity, before these would believe that she had not given birth to a child. There was every evidence that she had never borne a child. Indeed, if she had borne a child, I should probably have been able to deliver the tumor with only a slight laceration.

Prolapse of the Ovary; Hysterical Attacks; Treatment of Hysteria.

The next patient has been lately admitted. She was sent to me with a note from a lady who is eminent for her kindness to the poor, with the request that I should admit her. She is 29 years old; she is pale and anæmic. She has had four children. Her health began to fail after the second labor, which occurred eight years ago. She is regular at her monthly periods. They sometimes last for a day, then stop, and again come on for half a day. She has not lost too much since her marriage, but before that she lost a good deal. She has severe spells, which are so bad that her friends think she will not live through them. These are accompanied by a feeling of suffocation, pain in her heart, pain in her womb and an inability to lie in bed. She has to work very hard, and she tells me that she has a good deal on her mind. The symptoms thus far are those of a neurosis.

I shall now try to find out what is the matter and what can be done for her relief. I find behind the womb a little body, and pressing on this I give the woman great pain. There are some fragments of fæces in the rectum, but when I press backward on this body it slips from under my finger, giving her a great deal of pain. I think, then, that we have a prolapsed ovary, to begin with; further examination confirms me in that belief. There is a slight laceration of the cervix, but that does not cause the trouble of which she complains.

I shall now pass the sound. For the comfort of one or two gent'emen who could not introduce the sound in the ward class the other day, I will tell them that I cannot get this into the womb. The pain that she now complains of is purely nervous, for I am not hurting her at all, as I have not gotten past the internal os. I have now passed it in. The womb is in a good position. It measures 2.5 inches. There is a slight erosion. (The patient was now removed.)

This is a case that nineteen out of twenty physicians would say was suffering from disease of the womb. They would treat her for this erosion. She would go from one to another, and they would make various applications to the womb, but she would get no better. That is not the kind of treatment she needs at present, although that will do some good. The trouble with this woman is that she is below par, her nervous system is exhausted. She says that she has a great deal of trouble. I do not know what it is. Her husband may be intemperate. Her husband may be unfaithful to her. She is in a state of high nerve tension, pale and anæmic. She made a great fuss when I knew that I was not hurting her, but I did hurt her when I pressed on the prolapsed ovary. Why is it prolapsed? It is prolapsed on account of her general condition. All the organs suffer, but the ovaries and the womb, the reproductive apparatus, which is the most exacting during menstrual life, suffer the most. The spinal cord also sympathizes, and we have irregular distribution of blood, congestion and anæmia. In other words, as I sometimes illustrate it, we may have blushings and blanchings, as we have on the surface of the body, occurring in the womb. I am afraid, I become pale; I am ashamed, I grow red. What are these? They are produced by emotion. They are due to mental action on the nerves, and then the action of the nerves on the blood vessels. So it is in this condition. These blushings and blanchings are not on the surface but in the internal organs. That womb is blanching, and again it is blushing. The same thing is occurring in that spinal column, in that heart. This is a mere illustration, but when you ask me what is the disease, what is its pathology, what it really is, I will be hanged if I can tell you. The woman in this nervous condition has no control of herself. Her nerves are not in a state of equilibrium. They are in a state of uncontrol. They are no longer acting harmoniously. One side of the brain is acting more than the other. One set of nerves is acting differently from the others. They are not pulling together, and the result is that we get these conditions of spasms in which her friends think she is going to die. If her friends did not think so she would get over them more quickly. The symptoms are alarming. You will be called to a woman in spasms, and in nine cases out of ten they will be hysterical; but you must not make a mistake. They may be epileptic convulsions, or due to uræmia. There is one symptom which I think that you will not find in other forms of spasms, *i. e.*, tremulousness of the eyelids. The eyelids will be closed but they will be tremulous. When you have this symptom you can safely consider the spasm due to hysteria. I know of no other way of distinguishing hysteria by a glance except the general appearance of the patient, and this can only be learned by experience.

What is the best thing to do in a hysterical convulsion? The best thing to do is to give her a shock, mental or physical. If you are plucky enough to throw a bucket of water over her, she will recover very quickly, but you will probably be shown to the door by the irate father and mother. A good method of producing a shock is to place a piece of ice over the ovarian region or at the nape of the neck. The girl gasps and at once the state of fixity is removed. If you would administer two teaspoonfuls of Hoffman's anodyne, or a drachm of the milk of assafœtida put in the bowel, would probably relieve the condition; but you wish something that will act a little more promptly. My advice is to get down an emetic, if you can. I do not think it possible for any woman to be hysterical when suffering from nausea. If the throat is so rigid that she cannot swallow, give the emetic by the bowel. If you let a woman see that you are not scared worth a cent, she is going to get over her spell very quickly. If she can have the whole house anxious about her, it is nuts for her to crack; and if she can frighten the doctor, it is the biggest nut of all. If you are the old and tried physician of the family, you might remark, so that the woman can hear you, "If she don't get better soon, I shall have to heat that poker red hot and put it on her spine; that spine is in a very bad condition." I venture to say that there is not one woman in twenty who will not begin to get better. I do not advise you to do it, however. It would be like throwing a bucket of water over her. The father would, probably, invite you to the door.

Make a powerful impression. If an emetic fails, use Hoffman's anodyne. This is really a good remedy. It is a diffusible stimulant, more powerful than valerian, with which it is sometimes combined. As I say, give an emetic, if you can, for a woman must be very plucky if she can go through the nausea produced by an emetic and keep up her hysteria.

EDITORIAL DEPARTMENT.

PERISCOPE.

Extirpation of the Eye.

The Paris correspondent of the *Lancet* thus writes to that Journal:—

Extirpation of the eye is at all times a very serious operation, but it is considered by some ophthalmologists to be positively dangerous in the acute stage of panophthalmitis, particularly when it is complicated with phlegmonous inflammation of the orbit. Manhardt, Knapp, Von Graefe, have recorded some fatal cases after the operation, resulting from cerebral phlebitis, but Dr. Panas, Clinical Professor of Ophthalmology at the Hôtel Dieu, is of opinion that the accidents attributed to the operation are more frequently the result of the malady itself than of the operation. He has performed extirpation several times, for phlegmonous inflammation of the eyeball or of the orbit, and he has had but one death, which, however, was accounted for by a lesion discovered in the orbital bones at the autopsy. Dr. Panas lately performed the operation at the Hôtel Dieu on a young man aged twenty-eight, who was suffering from phlegmonous inflammation of the left orbit in its acute stage, the result of a severe blow with the fist on the eye. The operation was performed under most unfavorable circumstances, as the eye was in full process of suppuration, but it was crowned with success, as the man was able to leave the hospital in three weeks afterwards, quite cured. The following is the mode of operation performed by Dr. Panas for extirpation of the eyeball. After having separated the lids with the dilating forceps he transpierces the ball of the eye behind the ciliary body and the crystalline lens, with a curved needle threaded. This enables him to have a hold on the eye; then, with a pair of curved blunt-pointed scissors, he separates the conjunctiva from the cornea, and cuts through the muscles at their insertion, without even raising them with a hook. Then pulling the eye forward with the thread he cuts through the oblique muscles at their insertion, and the optic nerve at the point of entrance through the sclerotic. In this way he removes the eye perfectly intact, and the operation is certainly more rapidly performed than by the other methods. Dr. Panas considers it also less dangerous, for out of twenty-eight cases in which he had performed the operation in one year, he had never had occasion to record a single accident. His dressing is very simple. He inserts a small bit of soft linen, dipped in almond oil, between the lids, to prevent them sticking together, and then covers the whole with cotton-wool supported by a bandage, and without the intervention of the antiseptic treatment during or after the operation. Indeed, Dr. Panas, who is a great surgeon, uses the antiseptic method on general principle, and does not occupy himself about the rules laid down by Lister and his followers. I once asked an eminent French surgeon what he thought of Listerism. He said there was one good thing in it. It makes surgeons more careful with their dressings, but that the virtues ascribed to the system were as mythical as the creatures it was intended to destroy.

REVIEWS AND BOOK NOTICES.

NOTES ON CURRENT MEDICAL LITERATURE.

——"Effects of Alcohol on the Brain," a paper intended for popular instruction, read by J. B. Sullivan before the Stanton Excelsior Club.

——We have received, with the compliments of Dr. Reeves, a copy of the Act amending the Code of West Virginia, concerning the Public Health. It is very exhaustive and thoroughly covers the ground.

——Mr. George S. Davis, the publisher, announces that he will have ready, within two months, the translation of Dr. L. Lewin's great work on "Drugs." This translation has been made at the request of the author and under his supervision.

——"Compensating Conditions in the Causation of Sickness," by Milton Chase, M.D., of Otsego. This is a reprint, from the Annual Report of the Michigan State Board of Health for 1881, of a paper read at a Sanitary Convention at Battle Creek, March 29th, 1881.

BOOK NOTICES.

Transactions of the Medical Society of Pennsylvania, at its thirty-second annual session, held at Lancaster May 1881. Published by the Society.

Every physician in the State ought to have this volume on his book shelf; he ought, indeed, to make it a point each year to procure a copy of the proceedings, since their accumulated contents will furnish him at any time a history of the profession of his State.

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PHILADELPHIA, PA.

SPECIAL HOSPITALS FOR INFECTIOUS DISEASES.

Since we have realized the fact that scarlet fever, diphtheria, measles and like diseases are equally as infectious and contagious as smallpox, and since we know that the after effects of these diseases are in many cases infinitely more serious; so then do we have the same arguments for the establishment of special hospitals for these diseases that we have in the case of the more loathsome disease. Our only reason for setting apart a special building for smallpox patients, and compelling such to go there, is because we realize that isolation is one of the most important means of preventing the spread of the disease and checking its ravages. Since we know that isolation is equally potent to check the spread of all contagious or infectious diseases, there should be no hesitancy in preparing suitable buildings and enacting laws to guide the isolation of all patients affected with any infectious disease. There is one fact we must stare in the face. So long as contagious diseases, in the persons of their victims, are allowed to mingle with their fellows, so long will they be communicated from one to another, and so long will they continue to afflict and devastate the people of the world. There is but one way in which we can hope to stifle the wonderful vitality of these disease germs. We must remove them and the body in which they reside to some secluded spot, where they will not find new material upon which to inflict their pestilential presence, when their vitality will utimately become exhausted.

It would, no doubt, seem like a hardship to some, were they to be compelled to send those near and dear to them to a public hospital, when taken with scarlet fever, diphtheria, etc. But we must ever remember that one of the greatest foundations of social prosperity and advancement is the principle of the greatest good of the greatest number. This isolation will redound to the material advantage of the greatest number, therefore, it should not be objected to by the few, who may become so afflicted. Again, remember the golden rule, "Do unto others, etc." We would all like to have *other* cases of contagious diseases sent to the hospital, but would prefer to have an exception in our own cases. This principle is erroneous and selfish. It is a very important duty that physicians owe to society, to instruct those to whom their advice is potent, about the necessity of isolation, and to advise that every case be so isolated. The question of special hospitals was brought before the New York State Medical Society at its last meeting, by Dr. Jacobi, and the matter is now being agitated in New York. Several prominent philanthropists of that city have the matter in hand, and it promises soon to assume a tangible shape. In addition to the isolation, there is another important point to be considered. By erecting good buildings, in healthy locations, with their sanitary arrangements perfect, the majority of the patients would actually be surrounded by better hygienic influences than they would be at home; which would naturally tend to reduce the rate of mortality. Private rooms, handsomely furnished, with all home comforts, could be provided for those able to pay; while to the poorer classes, nice, clean,

well ventilated and lighted wards, with good medical attendance, and kind and careful nursing, would constitute a better home, and supply much more favorable conditions for recovery than the majority of them could command in their own houses. This is a matter of the greatest moment, and its careful and attentive consideration is recommended to physicians and public-spirited citizens everywhere.

News and Miscellany.

Medical Society of the State of Pennsylvania.

THIRTY-THIRD ANNUAL SESSION.

(*Continued from page* 532).

On the Nature and Treatment of Rodent Ulcers.

The object of Dr. Hearn's paper was to call the attention of general practitioners to the early recognition and treatment of this disease. The term, he claims, is a misnomer. The ulceration is secondary to the primary cancerous deposit. The deposit *always takes place in the skin*, generally engrafting itself upon a mole, wart, or some injury or abrasion. It differs from epithelioma, which may commence in the skin, also in the tissues beneath the skin. It differs from ordinary ulcers in that it is progressive and never heals. It differs from syphilitic ulcers in that it is single and never multiple. Although usually a senile disease it may occur in younger persons.

The ulcer is generally painless, unless it involves nerves, and is the tardiest of all forms of cancer in destroying life; sometimes lasting twenty or more years. The lymphatics of the neighborhood are never involved. Its usual location is on the face, although it may occur on the hands, vagina, or elsewhere.

The appearance of the ulcer, in rodent cancer, is that of a sore, with hard, ragged edges, and a somewhat solid base. Rodent cancer is not necessarily a malignant disease, the term cancer being an anatomical, while malignant is a clinical distinction. Properly treated in the early stage it may be radically cured. The usual exemption from glandular enlargement constitutes the fundamental distinction between rodent and malignant disease.

The *treatment* of this disease in the early stage is the complete destruction of the ulcer, even a little beyond its edges, using caustic or the knife. Caustics have failed often, because the edges and the base as well have never been entirely destroyed. This is why opprobrium has been cast upon the "caustic plan" of treatment.

Many patients will not submit to the use of the knife in the early stage of the disease, hence caustics can be as effectively used, especially if the ulcer be no larger than a silver half dollar. Those of a larger size call for the use of both knife and caustic.

The Doctor preferred the use of caustic potash, in the local treatment of the smaller ulcers, although other caustics may be equally efficacious. In using the escharotics, the entire surface, *i. e.*, base and edges, must be thoroughly cauterized. With the larger varieties, especially those involving the orbit, after the use of the knife the opening is to be packed with paste of chloride of zinc. This has for its object the destruction of any remaining cells which might have been missed in using the knife.

Another caustic to which the Doctor was especially anxious to call the attention of the profession was ethylate of sodium, which he thinks possesses to a much greater degree than other caustics the power it has of destroying diseased cells, and leaving healthy ones unharmed. It is more particularly adapted to superficial ulcers, especially in those cases where they occur on the nose or forehead, in which, on account of deformity, he dislikes to use a stronger caustic. He paints the affected parts freely, knowing that in a few days a slough will occur and leave the parts beneath entirely healed.

Dr. Alfred T. Livingstone, of Philadelphia, presented a paper embodying some

Suggestions Relating to Some Modifications of the Pennsylvania State Lunacy Laws.

Some of the principal points made were the necessity for greater care in the preparation of statements regarding the condition of insane patients, and the making of affidavits in cases of insanity; the importance of physicians granting certificates examining the patient independently. Further, the advisability of appointing a special official for the inspection of private and public insane asylums, and the advantage of the home treatment of the insane.

When the Society reconvened on Thursday, at 2 P.M., Dr. John L. Atlee, of Lancaster, Chairman of the Nominating Committee, made the following report of officers for the ensuing year:

President, Dr. Wm. Varian, of Titusville. First Vice President, Dr. A. Hewson, of Philadelphia. Second Vice President, Dr. E. P. Allen, of Athens. Third Vice President, Dr. Alvin Thayer, of Erie. Fourth Vice President, Dr. A. M. Miller, of Bird in-hand. Permanent Secretary, Dr. Wm. B. Atkinson, Philadelphia. Recording Secretary, Dr. Edward Jackson, West Chester. Corresponding Secretary, Dr. John G. Lee, Philadelphia. Treasurer, Dr. Benjamin Lee, Philadelphia. Committee of Publication, Drs. Wm. B Atkinson, Benjamin Lee and Charles S. Turnbull, of Philadelphia, and Edward Jackson, of West Chester. Dr. J. J. Sibbett, Chairman Committee on Medical Legislation, submitted a report in reference to the act of the Legislature providing for the registration of all practitioners of medicine and surgery. He said that after addressing county medical societies and prothonotaries in counties where there are no societies, responses were received from 46 out of 67 counties in the State. From these it appeared that out of a total of some 2200 registered, 674 were graduates of the University of Pennsylvania and 1020 from the Jefferson Medical College, while 619 were not graduates of any college. In Philadelphia, out of 1554 registered 220 are homœopaths, and 210 from institutions outside of the University of Pennsylvania and the Jefferson Medical College; 48 are registered who

are stated to be without any regular medical education. The Committee report that the enforcement of the registration act is the first duty of the profession, and a committee should be appointed in each county medical society to supervise the work.

Dr. A. L. Kennedy stated that cinchona could be successfully cultivated within the United States, and said that the new Commissioner of Agriculture was in favor of the enterprise, and that the Society should encourage him.

At 2.30 P.M. the Address in Hygiene was delivered by Dr. W. F. Muhlenberg, of Reading, who chose for his subject "Micro-germs;" the address is so well worthy of publication in full that we reserve it for a future issue, since it is too long for our limited space.

A paper was read by Dr. Wm. S. Little, entitled

Subjective Traumatism of the Eye;

Its Importance when the Question of Sympathetic Irritation or Sympathetic Ophthalmia Arises.

Traumatism of the body is strictly objective. Conditions arise in organs or parts of the body which impair their action and function as seriously as by foreign bodies; this is subjective traumatism. The eye presents for observation and treatment, then, two forms of traumatism.

Objective traumatism of the eye is due to injuries by foreign bodies and effects in the eye by general disease, by which vision is impaired, lost, or the organ destroyed, with or without sympathetic ophthalmia. Subjective traumatism is due to the condition in the eye resulting from the strain occasioned by optical defects, impairment of vision resulting from, or inflammatory action and diseased condition produced by, strain on the cornea of the eye. Objective traumatism is chronologically of first importance, as ophthalmic surgery has longer been studied than ophthalmic medicine and the correction of optical defects.

Statistics of ophthalmic work afford the following: 17.7 per cent. is operative; 4.5 per cent. of these for enucleation of the eye, for some of the many forms of objective traumatism; this is from the report of the Dublin Institution for Healing Diseases of the Eye. Subjective traumatism has a larger field.

Dr. Risley's (of Philadelphia) statistics give only 12.28 per cent. of eyes that are emmetropic; myopic 19.33 per cent.; hypermetropic 66.84 per cent. These statistics are much higher than those of Lorenz and Derby, of New York, and Erbmann, of St. Petersburg.

The abuse of the muscular vascular tunic of the eye in obtaining vision among persons with ametropic eyes, leads to subjective traumatism and serious results to vision and the tunic of the eye ensue, as serious as occur in the small field of objective traumatism, which in emmetropic eyes produces only objective traumatism, while objective traumatism occurring in ametropic eyes yields more serious results, and subjecto-objective or objecto-subjective traumatism arises.

The emmetropic eye is structurally healthy, though Dr. Risley states 20 per cent. are unhealthy; yet 80 per cent., according to his statistics, remain healthy and only subject to subjective traumatism. The emmetropic eye is free from disease, and when diseased readily cured, or when injured by foreign bodies is less liable to take on sympathetic irritation or sympathetic ophthalmia of the other eye, it b ing emmetropic also.

The correction of optical defects is essential in diseased eyes or the condition of emmetropia must be known to exist.

If this is so essential in diseased eyes or in therapeutical treatment, it becomes far more important when surgery is applied, as after operation all optical defects should be corrected.

When the question of sympathetic irritation or sympathetic ophthalmia arises, the necessity of finding out whether it is due to the objectively traumatized eye or whether it is due to the optical defect in the eye not injured, is necessary, so as not to enucleate an eye unnecessarily, or if it be enucleated still correct the optical defect in the remaining eye, so as to do away with all forms of traumatism.

Cases are reported in support of all the conditions that are experienced in the paper as occurring in the Eye Department of the Jefferson Medical College Hospital, under the care of Prof. Wm. Thomson, Ophthalmic Surgeon to the Hospital and the writer of the paper, and also those in his private case work.

Dr. Leffmann, of Philadelphia, read a paper on the "Medical Relations of the

Prevailing Food Adulterations.

The paper began with a notice of the inaccuracy of the general newspaper agitation on the subject, and pointed out that the general character of adulteration was not of a nature calculated to actively spread disease. Especial attention was given to glucose and oleomargarine, as important substitutes for common articles of food. It was pointed out that the first of these bodies was so much like common sugar, and the second so much like common butter, that no serious injury could result from the extensive use of either. The impurities present in glucose, although sometimes spoken of with alarm, are really of little importance, and the difference between the chemical composition of butter and oleomargarine consisting merely in the absence from the latter of a few per cent. of butyric acid, such difference cannot be of any consequence in a dietetic point of view. The use of glucose in fermented liquid, as a substitute for malt, was shown to be of absolutely no consequence; for the sugar of malt and other fermenting liquids is substantially the same as that made by the artificial method, and, of course, the alcohol formed from either is identical. Specimens of granulated glucose and of table sugar largely adulterated with it were shown, and a test for the detection of such adulteration was described. This consists in boiling a solution of the sugar with a little sodium carbonate, when a yellow color indicates glucose.

Note was also made of the now frequently published statements as to the use of such bodies as ground talc and other insoluble powders as a means of adulterating flour, butter, candies, etc. Dr. Leffmann stated that, in spite of the frequency of these statements, he never was able to obtain a specimen of food adulterated with such materials, and he doubted the extended use

of them. It was pointed out, however, that some inferior kinds of groceries are made up of sweepings and refuse, and such articles will be marked by a rather high percentage of mineral matter. Of this kind was a sample of cheap ground coffee, which was found to contain about fourteen per cent. ash, while the good article gave only about four per cent. The extensive use of starch and plaster of Paris in candies was stated to have been amply confirmed by analyses, and in reference to the use of poisonous colors, lead chromate (chrome yellow) was the only objectionable substance of at all frequent occurrence. In conclusion, the author of the paper stated emphatically his conviction that at present no necessity existed for specially enlarging the power of the State or National governments in this matter, as the wrong is mostly of a commercial nature, and probably entirely controllable through the ordinary channels of justice and the laws as now existing.

A paper on

Puerperal Malarial Fever

was read by Beriah E. Mossman, M.D., of Greenville.

The attention of medical men who reside in malarial regions has of late years been directed to the subject of the influence of malarial or telluric poison upon the lying-in-woman. The result of careful clinical investigations has been to secure abundant testimony, which goes to prove that during that period the poison will develop itself with such symptoms and conditions as to justify the conclusion that malarial fever is one of the diseases incident to childbed, particularly in localities where malarial diseases prevail. Although the term *puerperal malarial* fever is not included in medical nomenclature, it is, in my opinion, an appropriate one, and as time passes, and the disease is better understood, it will meet with recognition by practitioners and occupy a place in the medical literature of the progressive future.

The views which I express upon the subject in this paper are those arrived at from my own study and observations during an experience of over eighteen years' practice in a highly malarial region, during which time I have treated quite a number of these cases in my own practice, and have had the privilege of seeing others in the practice of cotemporary physicians.

I have been unable to find any literature upon the subject, with the single exception of an excellent paper written by Dr. Barker, and published in the *American Journal of Obstetrics*, April, 1880. The publication of Dr. Barker's paper anticipated me, as I was at that time preparing an article for publication upon the same subject.

It is a disease not infrequently met with, and bears a striking resemblance in its symptoms to other diseases of a more serious nature, incident to the puerperal state, in which local phlegmasia exists. Hence, it is important that it should be recognized by the practitioner as early as possible whenever met with, for upon a correct diagnosis will depend intelligent and successful treatment. The occurrence of chills, followed with high temperature, at such a time, cannot fail to cause alarm and anxiety in the mind of any person around the patient, as the great mortality of puerperal diseases is well known. Hence, if a chill has occurred, followed by high fever, and the case can be promptly pronounced a malarial disease, it will save the friends and all those near and dear to the patient a great deal of anxiety.

After an account of the etiology of the disease, Dr. M. describes the symptoms, clinically. Cases of puerperal malarial fever differ greatly in the severity of symptoms, although every case will have paroxysms of more or less prominence, recurring at moderately regular intervals. These paroxysms will be followed with periods of apyrexia, or if not of complete absence of fever, the temperature will be much lower and a general letting up of all symptoms. The most prominent symptoms, according to Dr. Barker, are "chills, sometimes very slight, often a temperature near two degrees higher than is found in the beginning of any other puerperal disease, a rapid pulse, followed by greater prostration than is usual with other diseases during this period. Then, in these cases, where the disease first manifests itself by such an explosion of striking and alarming symptoms, there is a remarkable remission on the following day, so that the obstetrical attendant flatters himself that the attack is ephemeral, and that his treatment has been most wise and successful; but this delusion is removed, one, two or three days after, by a recurrence of the attack, but generally less severe. But the succession of phenomena first described only appear in typical cases. I am disposed to believe that in a large majority of cases, three or four days before the explosion, the patient finds herself depressed by a general malaise, more or less pain in the head, back and bones; insomnia, thirst and loss of appetite; and when the disease is developed, the chills are less severe, the temperature not so high, the pulse less rapid and the remissions less marked."

My experience has been that some cases commence without any of the prodromes of malarial fever being present to mark the approach of the chill, and the attack may begin very soon after delivery, in a few hours, or during the first day. Again, the chill may be very slight at first, indeed, so slight as to entirely escape the notice of the patient and the nurse, and when this is the case the first warning of the existence of the disease will be a sudden rise in temperature, but at no time reaching the same height as is the case when the chill is severe and prolonged. Diarrhœa, pain in the bowels, offensive or suppressed lochia are conditions that are sometimes present, and secondary hemorrhage is likely to occur in cases where the disease continues any length of time, and will not succumb to treatment. Delirium is a symptom I have seen, but most generally in those cases where there was suppression of the lochia, or it was scant and offensive. In these cases I have observed that the temperature mostly kept high, the pulse fast, during the period when the intermission should occur; at the same time the skin would be moist. It has been a matter of doubt in my mind whether these symptoms just mentioned were not mainly due to poisoning from absorption of septic matter. But there may be suppression of the lochia

in these cases without any delirium or symptoms of blood-poisoning. In most cases of suppression, where it occurs soon after the delivery, it generally returns soon after the disease is cured.

Puerperal malarial fever may follow successive confinements in the same patient, as was the case with one lady whom I attended after her last two confinements. This was exceptionally worthy of notice from the fact that the first time she had the disease the chill commenced in about one hour after labor had been completed, a remarkably early period of development.

The temperature may keep up quite evenly, the pulse beat high for two or three days, but close observation will show periods of slight intermission, and an absence of pain and tenderness in the bones should lead us to the conclusion that the case is malarial. If quinia is given in full doses at such times as the symptoms are least aggravated, or, in other words, at the period of slight intermission, and its administration is followed by moisture of the skin, slowing of the heart's action, and rapid falling of temperature, the case is undoubtedly, other symptoms corroborating, puerperal malarial fever. Although when these conditions exist it is difficult to determine the true nature of the case, I believe that by careful watching and study a correct diagnosis can be made.

The earliest period at which the disease has made its appearance, in my experience, was in the first case I have related in this paper, in about one hour after delivery. This patient lived in a malarial section of the city, and had had an attack of intermittent fever several months before, but at the time of confinement, and during the period of pregnancy, was unusually well and free from any of the symptoms that ordinarily precede the advent of malarial diseases.

I am inclined to believe that most cases will commence at about the sixth or seventh day.

The second case I have given shows that the intermittent attack, after having been brought under submission by appropriate treatment, recurred on the fourteenth day. This is an important fact, and should not be forgotten in the treatment of cases.

The disease may occur at any time during the puerperal state, which includes the period of the first month after delivery, or until the physiological conditions have been restored.

Diagnosis.—The remarkable resemblance that puerperal malarial fever, in many instances, bears to the formidable inflammatory diseases, or those of septic origin, that occur during the first month of parturition will cause the medical attendant some trouble to decide, with any degree of certainty, what disease he has to battle with. In some cases it will be likely impossible to make a diagnosis until the stages have fully developed.

Dr. Barker says, in speaking of differentiation, "That in malarial fever a fall of temperature of three or four degrees is always attended with a corresponding decline of other symptoms, which is not the fact in septicæmia, and the latter is rarely accompanied by pain of the head, back, or limbs. The sensibilities are blunted instead of being morbidly acute.

When the disease first manifests itself, after the sixth or eighth day, I think, however closely the symptoms may resemble septicæmia, the fear of this may, with a considerable degree of certainty, be dismissed."

There is danger, however, that it may be confounded with puerperal fever; but if it is remembered that puerperal fever is a disease that generally begins on or about the second or third day, such a mistake is not likely to happen very often. Further, puerperal fever, after the onset, pursues a steady course, and is not subject to febrile paroxysms, followed by remissions of high temperature, and these recurring at regular periods. There is most always pain, severe and lancinating, confined to the hypogastrium, the bowels soon become swollen, excessively tender to the touch, and the patient lies with the limbs drawn up; in many cases the weight of the bedclothes cannot be borne.

From septic metritis, cellulitis, or phlebitis it can, I believe, be easily distinguished, as the characteristic symptoms of these diseases in connection with the physical condition will reveal the true nature of the disease upon investigation. I am well aware that in some cases of inflammatory diseases the symptoms are so marked, and the local trouble so slight, as to amount to nothing more than tenderness upon pressure over the womb. In cases of doubt, if the attendant is watchful, and the disease be malarial fever, it will, without doubt, sooner or later show its true nature by falling of temperature, decline of the other symptoms, and moisture of the skin.

Treatment.—There is but one known remedy that is universally admitted to be a sure cure or specific for malarial fevers, and that is quinine. It should be given in full doses from the first. It is my practice to give fifteen to twenty grains upon the first indication of a fall of temperature. When the stomach rejects it, as sometimes happens when given in large doses, it will be best to combine it with a little opium, or administer it by enema. It should always be borne in mind that the disease is liable to return after having been checked, and the quinine should be continued for several weeks, in smaller doses. Attention should be paid to all hygienic conditions, and the body sponged daily with alcohol and water.

Intra-nasal Surgery.

Dr. Carl Seiler, of Philadelphia, read a paper on Intra-nasal Surgery. In it he recounted some of the surgical operations lately introduced for the relief of nasal stenosis, which he considers the prime cause of the symptoms of nasal catarrh. The obstructions to breathing through the nose which could be removed by surgical means were divided into two classes, viz., those produced by swelling or enlargement of the mucous membrane and by soft tumors growing from the mucous membrane, and into hard, bony or cartilaginous projections into the nasal cavities. The former class was again divided into permanent and temporary stenosis or obstructions. The Doctor then went on to describe the operations advisable for the removal of these obstructions, and said that he had found that the most satisfactory and at the same time least painful method of removing those swellings which are situated at the anterior portion of the turbinated bones, and which are called anterior hypertrophies, was by

means of the galvano-cautery knife; describing the different steps of the operation. He said that it is of great importance in this operation to have the platinum loop at the proper temperature, for if it is too hot, considerable bleeding will follow the incision, and if too cold the application is very painful. With the galvano-cautery batteries in the market it is impossible to accurately graduate the temperature of the knife, and he showed a battery devised by himself for the purpose, which is so arranged that the zinc plates are suspended above the cups containing the carbons and fluid, and may be immersed to any extent by depressing with the foot a treadle on the outside of the box containing the battery. The amount of surface of the zinc plates exposed to the action of the acid determines the amount of electrical current and consequently the amount of heat in the loop of the knife.

The immediate result of the burn is the formation of an eschar and of a certain amount of acute inflammation which stand in a direct ratio to the extent of the burn, and therefore not too large an incision should be made at any one sitting. The ultimate result of the operation is the formation of bands of cicatricial tissue, which by its contraction as it becomes firm binds down the swellings and thus prevents the stenosis. In the same manner a curved galvano-cautery knife is used to cauterize the hypertrophied adenoid tissue in the vault of the pharynx above the soft palate. These operations, if proper care is exercised, are not at all dangerous or painful, and on that account are preferable to the application of chemical caustics, which, as a rule, give great pain to the patient and are in the end not as effective as the galvano-cautery. The author then went on to describe the methods employed by him for the removal of hypertrophies situated far back in the nasal cavity and of nasal polypi. For these operations he employs a wire snare invented by Dr. Jarvis, of New York, the steel wire loop of which is thrown around the hypertrophy or polypus, and by gradually reducing the size of the loop the tissue engaged by it is snared off. To prevent a return of polypi he advised the cauterization of the stumps with the galvano-cautery knife. This method of operating he found to be attended with very little if any pain and hemorrhage. Localized thickenings which are not infrequently found on the cartilaginous septum in old cases of nasal catarrh, and which produce partial nasal stenosis, may also be removed with the wire snare, but when these localized thickenings have become ossified, or when the obstruction in the nose is due to an exostosis of the bony septum, or to an enlargement of the turbinated bones, or finally to a bony spur from the palatine process, neither the galvano cautery nor the wire snare are of any avail, and the obstructions must be removed by drilling them away. For these operations dental engines have heretofore been used to hold and rapidly revolve the drills and burrs, just as the dentists use them for excavating decayed teeth. Within a short time, however, the author stated that he had substituted for the dental engine a small electric motor, invented by Mr. Griscom, and manufactured by the Electro Dynamic Company, of Philadelphia, to which the hand-piece carrying the drills and burrs is attached, either directly to the spindle of the motor, or by means of a short, flexible shaft. The speed of the drill can be regulated to a nicety by means of the automatic, adjustable battery, which belongs to the motor, from a few hundred to 16,000 revolutions per minute, and its power is equal if not greater than that of the dental engine. When used for operation the apparatus is suspended from the ceiling, which run over pulleys and carry counter weights so as to balance the motor in any position in mid-air, and in front of the patient, and to keep it in any position it may be placed in. This arrangement relieves the hand of all weight, and thus a much more delicate manipulation of the tool is possible than can be obtained with the dental engine, for in the latter instrument the hand has to support the weight of the hand-piece and flexible shaft or arm, and besides a good deal of the motion of the foot working the treadle of the fly-wheel is communicated to the hand, making it unsteady. The tools used are much the same as those employed by the dentist, except that when the bony obstructions are far back in the nasal cavity they should be longer in the shaft.

The operation is performed by riddling the bony obstructions with holes made with a cutting drill, and the substance between the holes is then broken down with a coarse burr, and, finally, the shreds of mucous membrane and spicules of bone are trimmed off with a pair of scissors. Usually but a very moderate amount of inflammation of the mucous membrane in the nose follows the operation, and the wound heals readily in a few days. As a rule, it is found more convenient for the operator to place the patient under the influence of ether, so that the involuntary struggles of the patient do not interfere with the operation; this is, however, not absolutely necessary, as the pain is not near as great as might be expected.

For the relief of the obstruction caused by deviation of the septum a variety of operations have been recommended, but the Doctor stated it as his opinion that the simplest, easiest to perform, and at the same time very satisfactory operation, is the following: With a strong pair of forceps which has inserted into one of its blades a number of knife blades, at right angles to the surface and arranged in the shape of a star, the septum is punched at its greatest curvature, by introducing the blade carrying the knives into the open nostril and the unarmed blade into the closed one, and then compressing the handles. The punch is then removed, and with a pair of forceps having flat blades the septum is forcibly straightened, which becomes possible since the triangular pieces produced by the cut made with the punch lap, and thus the distance from the base to the top of the septum becomes diminished. A wooden or ivory plug is then introduced in the formerly closed nostril, with a view to keep the septum in its new position, and is left there until the parts have sufficiently healed to remain straight without that support. This operation is also not very painful, and can readily be performed without ether.

For the removal of necrosed bone and for treating caries of bone in the nasal cavity, the

lecturer said he knew of no better means than the dental drill and burr attached to the electric motor, for the delicacy of movement of the instrument allows the hand at once to detect when the tool has penetrated the diseased structure and sound bone is reached.

Deep ulcerations of the mucous membrane in the nasal cavity, he finds, do not readily yield to the usual applications of chemical caustics, and, therefore, he treats them either with the galvanocautery knife or the corundum cone mounted on a long shaft and revolving rapidly in the electric engine. When the ulcers are small the charring of the surface with the glowing platinum loop answers every purpose and is not near so painful as the application of solid nitrate of silver. If they are large, however, it seems best to freshen up the surface with the corundum cone, which, when rapidly revolving, enables the operator to remove all diseased tissue without injuring the healthy.

The paper closed with a few remarks on the medicinal after treatment of nasal catarrh, and was illustrated by the exhibition of the various instruments described.

Thursday evening a very handsome reception was given the delegates in the Oil Exchange, which is a very fine building. After the promenade concert dancing commenced at nine o'clock, and was continued until three in the morning.

FRIDAY MAY 12th.

Society convened at 9 o'clock; prayer was offered by the Rev. F. H. Rowley. The Address in Obstetrics, by Dr. R. S. Sutton, was then read by Dr. Daly, of Pittsburg. It was a most interesting paper on Abdominal Surgery, in especial connection with ovariotomy, laparotomy, etc., and described the first operations of McDowell and Washington Atlee, and detailed the operations of Langenbeck, Shrœder, Martin, of Berlin, Nussbaum and others.

Dr. John B. Roberts, of Philadelphia, presented a paper entitled

Excision of Cartilage in Nasal Occlusion, due to Deviated Septum.

When the deviation is not very great, relief can sometimes be afforded by making a crucial or stellate incision in the cartilage, at the point of obstruction, and then pressing the weakened partition away from the side of the nostril. It can be kept in this position by a nasal bougie until the wound has cicatrized, if it tends to assume its original condition.

In very many cases, however, the most satisfactory treatment, because the most radical and expeditious, is to cut out a disk of cartilage at the point where deviation causes obstruction. This is best done by the nasal punch or cutting forceps here exhibited. The opening left between the nostrils is no objection to the procedure, because it does not weaken the support of the nasal cartilage materially, and is not small enough to produce whistling sounds during respiration. It is not visible unless the nasal cavities are examined carefully with light or with a speculum, hence it cannot be objectionable on cosmetic grounds. The fenestrated cutting forceps which I have had made are an improvement on others intended for the purpose, because the mucous membrane on both sides of the septum is more cleanly divided, the disk of cartilage is more likely to be removed by the forceps when they are withdrawn, and the instrument retains its keen edge longer. After an opening in the septum has thus been made, any remaining obstruction can usually be remedied by enlarging the orifice by cutting out additional pieces. When the forceps has been forcibly closed upon the divided part of the cartilaginous or bony septum, it should be rocked from side to side a little, to ensure entire division of the tissues.

There seems to be prevalent a traditional notion that the cartilaginous partition between the nostrils must not be perforated in the efforts to render patulous the occluded nostril. Hence patients with one nostril entirely stopped by deflection of the triangular cartilage are often told that nothing can be done to relieve the nasal voice and other symptoms of throat and nose disease due to the imperfect respiration. Sometimes attempts are made to relieve the trouble by dilating the narrowed orifice, or by paring away a portion of the surface of the cartilage. In the latter method caution is given, at least in some text-books, to avoid perforating the septum. This is a mistake.

Dr. William Varian, of Titusville, presented the following case of

Ovariotomy.

On the 16th of February, 1881, I called at the office of Dr. Charles B. Kibler, in Corry, when I chanced to meet Mrs. G., who, in the opinion of Dr. Kibler, was afflicted with a tumor of the left ovary. At Dr. Kibler's request, I made a hasty examination of the case. I found a firm, hard, inelastic tumor, as large as the womb at the fifth month of pregnancy, occupying the left hypogastrium and dipping deeply into the pelvis. It was smooth, had few perceptible irregularities of the surface, was movable, and free from pain and soreness when handled. Mrs. G. was 39 years of age, and her knowledge of the tumor extends over two years. A vaginal examination showed that the pelvis was well filled with the mass, and the womb, pushed somewhat to the right, was of an abnormal depth. I could detect no fluctuation, and the tumor, when moved, carried the uterus with it. The patient was in good health, well nourished, with an active circulation, and was remarkably free from either systemic or sympathetic disturbance. My examination was far from being a satisfactory one, owing to want of time. Mrs. G. was anxious not to lose a train nearly due, on which account I was obliged to dispense with the removal of a sufficient amount of her heavy winter clothing to enable me to have free access to and perfect command of the abdomen. In spite of this,

felt justified in diagnosing a uterine fibroid, and in advising non-recourse to operative procedure so long as her health remained good.

About eight months later, on the 10th of October, 1881, I again met Mrs. G. at Doctor K's office, when I found that a very marked change had taken place in her condition.

It appears that shortly after my examination in February, Mrs. G. had visited one of the Western States. While there, some time during the month of April, she met with a severe fall. Her feet slipping, she came down in a sitting posture with such violence that for twenty-four hours she was obliged to maintain a recumbent position. A moderate degree of lameness and soreness was the only apparent result of the accident for a period of two or three weeks, at the end of which time she noticed that she was beginning to perceptibly increase in size. This increase had steadily continued up to the time of our meeting, and was accompanied by soreness and discomfort, together with the sympathetic disturbances so common in these cases. She was now as large as a woman at the full time of pregnancy, and showed all the evidences of a rapid failure of the systemic powers.

I found the same firm, hard tumor in the left hypogastrium, apparently unchanged in size, which existed at the time of the previous examination. The rest of the abdomen was occupied by a large tumor, evidently containing several subdivisions, and yielding on palpation sensible, although somewhat indistinct, evidences of fluctuation. The two tumors could be completely separated, so that I was able to pass my hand between them to an extent only limited by my power of indenting the abdominal walls. Moving one growth did not appear to influence the other, unless made to impinge directly upon it. This examination was made under the same unfavorable circumstances as the first, but still I felt satisfied that there were two tumors coexistent in the case. The one probably ovarian and colloid, though possibly an elastic fibroid. The other a fibroid. I now suggested the removal of the ovarian tumor and with it the opposite ovary, expecting by thus producing an artificial menopause to completely control the further growth of the fibroid, and possibly to secure a decided reduction in its size. If I found the removal of the fibroid, with or without the uterus, indicated by the appearances presented after laparotomy, I would remove all the diseased organs.

Circumstances of a personal nature prevented my patient from resorting to an operation until four months had elapsed, when, on February 15th, of this year, I operated at the home of Mrs. G., near Columbus, Warren county, in the presence of the following gentlemen: Drs. Kibler, Elstone and B. H. Phelps, of Corry; Walling, of Columbus; J. T. Waid, of Spartansburgh; Sherwood, of Union; Whitney, of Lottsville, and Blaine, of Pleasantville. The patient at this time was very anæmic and prostrate. Her abdomen was enormously distended by a very large polycyst, easily diagnosed, the upper cyst giving free fluctuation, while the rest of the tumor gave that elastic semi-fluctuation so characteristic of cysts filled with semi-solid colloid material. A solid mass about the size of a pint bowl on the left upper corner was all that could now be traced of the fibroid, but this still retained all the characteristics of the original tumor. Every care had been taken to thoroughly prepare the patient and to render aseptic the room, as well as the patient herself, the surgeons present, the instruments, sponges and operator. As I anticipated a more than usually formidable operation, I had directed that the patient should be brought to a condition of incipient inebriation. By thus producing turgidity of the cerebral vessels I hoped to secure prolonged anæsthesia, with the least risk to my patient, and with a small expenditure of the anæsthetic.

I will not dwell upon the successive steps of the operation, as these vary only in minor details, and are too familiar to all present to be of special interest. Besides, each case furnishes its own laws and guides for its conduct; and my only endeavor is to accomplish the work which lies before me, after the abdominal section is made, with as much rapidity as is consistent with thoroughness, and to meet with prompt decision each emergency that arises, in the manner which at the time appears to be most likely to conduce to the ultimate safety of my patient. When permitted to exercise my preference, I now always drop the pedicle. But I use the clamp and other methods of treatment when they manifest special advantages in a case. So much by way of parenthesis.

I found but one tumor in this abdomen. This was a polycyst, of great size. All the cysts but one were filled with colloid material, which was almost solid in consistency. The exceptional cyst, a large one, contained the thick, dark-colored, viscid fluid so familiar to all ovariotomists, and so characteristic of a large number of ovarian cysts. On the left upper corner of the tumor was the firm, solid mass alluded to, which, when incised, presented all the sensible features of a genuine fibroid. This was an integral portion of the tumor. The pelvis was completely filled with organized fibrinous exudation, enveloping all its contents and rendering the developments of a pedicle to the tumor impossible. After an unsuccessful attempt to enucleate, I ligated the base of the tumor, and removed it. Its weight, with contents, was estimated at 45 lbs.

The patient was under chloroform about fifty minutes.

The after treatment was conducted by Drs. Kibler, of Corry, and Walling, of Columbus, and the skill, energy, and judgment displayed by these gentlemen merit a detailed report from day to day, but this is forbidden by the limits of this paper. A chart of pulse and temperature curves, furnished by Dr. Walling, is herewith submitted, by which we see that the highest range of the thermometer was 101°, which point was reached during the first twenty-four hours. During the second day 100° was the highest temperature attained. After this, 99½° was the greatest temperature, while the greater portion of the time, for many successive days, it did not exceed the normal. The pulse was quick throughout. During the first three days some bloody urine was drawn from the bladder, but this readily yielded

to the exhibition of the salicylate of soda. The patient suffered from urethritis and vaginitis, largely owing to bad nursing. The bowels acted normally, and the condition of the abdomen was all that could be wished, during the entire course of the case. At first the discharge was very free, and aseptic irrigation of the cavity of the abdomen was required several times a day. A sense of heat and soreness in the abdomen, which commenced on the fourth day, was promptly met, and as promptly subdued, by the ice bag, together with the exhibition per orem of quinia and opium. The silver sutures were withdrawn on the ninth day, at which time there was union of the entire wound, except where the drainage tube rested in the lower angle. On the 15th day all discharge had ceased and the drainage tube was removed. At this time the patient, her friends, and her physicians felt assured of a complete recovery. But, alas for human hopes; on the seventeenth day a violent attack of vomiting set in, which for twenty-four hours resisted all treatment, and produced an amount of prostration which in the end proved fatal. In spite of rectal alimentation, and every means which experience and ingenuity could suggest, the patient gradually sank away, and died on the twenty-first day. On the 8th of March I visited Columbus to perform another operation, and on my arrival was met with the sad intelligence of the death of Mrs. G., which occurred the evening of the seventh, just twenty-one days from the date of the operation.

It is due to Drs. Kübler and Walling to state that the patient was too poor to be able to provide herself with a trained and skillful nurse; and that she lay at a farm house, two miles from one of her doctors and six miles from the other. And during her entire confinement, the roads were in such condition, that whether the physician rode, drove, or walked to see his patient, he would be inspired with an ardent wish that he had selected some other method of locomotion. Under these circumstances, are we not justified in saying that neither patient nor doctor had a fair chance?

Although the case briefly reported above has an intrinsic interest of its own, yet I attach to it an added interest, because it appears to throw some light upon the possible reason of the rarity of the occurrence of ovarian fibroids, so far as their existence has been demonstrated by operation. That experienced and skillful ovariotomist, Dr. Wm. Goodell, states, in a clinical lecture recently reported, that the occurrence of fibroid tumors of the ovary is so rare as to have been denied by some writers. But that he had encountered three tumors of this nature, in his personal experience. I have myself removed one ovarian fibroid, and had I operated on this patient, in February, 1881, about the time I first saw her, I see no reason to disbelieve that I should have added one more fibroid to my list. For that this tumor was a fibroid, or at least what we call a fibroid, at that time, I see no reason to doubt. That the injury produced by the accident which occurred in April, or some other cause, had produced degeneration of the tumor, I also believe.

I ask, then: Is it not possible, and even probable, that this is a frequent termination of fibroid tumors of the ovary? And since recourse to operative interference is usually delayed until the patient's health begins to give way, may not this degeneration be the usual termination of this form of tumor? I well remember, in my earlier experience as an ovariotomist, how much I plumed myself on having successfully removed a colloid polycyst, which a year or more before had been pronounced a fibroid by a skillful and experienced ovariotomist.

Another question. Are colloid polycysts benign in their character, or do they possess the elements of malignancy? In other words, are they semi-malignant tumors whose incipient stage is represented by what we call a fibroid?

The hope of obtaining a reply to these questions is my only excuse for occupying your time and attention with a report of so common an occurrence as the removal of an ovarian cyst.

After which a paper on "The Use of Atropia," by Dr. E. Dyer, of Pittsburg, was read by title.

FRIDAY AFTERNOON.

Society convened at two o'clock.

Dr. Frances N. Baker then read a paper on

The Management of the Perineum During Labor.

Since the invitation to prepare a paper to be read before this Society came late, and the necessity for a prompt reply was urgent, I selected my subject somewhat hastily, and more with a view to what is to myself of interest and importance, than with a thought of what would either interest or instruct my audience.

Therefore, if any further apology than this seems needful for occupying the time of the Association with the consideration of so *trite* a theme, I will offer in my defence *the large number of lacerated perineums* that are constantly being found upon the gynæcological table.

I feel certain that either the *methods* which we have adopted for the protection of this important structure have been very defective, or that these same methods have been imperfectly *executed*, else we would not so constantly meet with the undeniable proofs of many disastrous failures.

This subject of "perineal preservation" (or support, as it is frequently termed) is entirely the outgrowth of civilization, for the ruder nations make no attempts whatever in this direction. And it would be a matter of much interest, and some profit, perhaps, could a tabular statement be obtained of the number of lacerations happening among a people who practice no manner or method of preservation, and then compare it with the number of tears occurring in the hands of those practicing the most active interference (even to the extent of unremitting support for ten or twelve consecutive hours).

Another item of not less interest would be a comparison of the *different* methods now in use for the avoidance of lacerations, with the percentage of failures belonging to each. But such information as this will scarcely ever be ascertainable.

Statistics upon perineal lacerations, outside of hospitals, are not very abundant. There seems to be great unwillingness on the part of the profession to acknowledge the occurring of this accident, unless it has happened at the hands of some other practitioner.

Again, in acknowledgments upon the subject a great difference exists in estimating the gravity of the lesion. What one observer estimates as a slight rent, another with higher ideals of professional success regards a tear of considerable moment. Then, too, we have no uniform standard of measurement, and the figures employed do not give a correct idea of the *extent* of the injury. The centimeter of one or the inch of another may mean much or little.

Since perineums are not all of the same dimension, we will arrive at a more accurate understanding of the condition, if we regard the whole perineum as the unit of measure, and then estimate the injury as fractional parts of the whole, rather than the length in inches or centimeters.

And, finally, one of the most vital causes of our incompleteness of information upon the number as well as extent of the injuries occurring to the perineum during labor is the failure of the physician to examine the patient after delivery, in order to ascertain just what the state of the parts may be. I speak advisedly, and of what I do know, when I say that, too often for her future comfort, he goes away without an idea of the mischief done, and she, so long as she has rectal and vesical control, believes that all is well, but finds, after she assumes her wonted duties, that she is *not* so strong as before her accouchement, and concludes that her debility and discomfort arise from the fact that she is an *American* woman, and that she has been unfitted for maternity by having had too much education. But, alas! for this pleasant little fiction, many women seek our private office and the treatment room of the hospital, who have neither college education nor perineums.

But before discussing the *methods* of preserving the perineum, a review of the *causes* that render some form of interference necessary will, perhaps, not be misdirected effort.

(1) In cases when the sacrum is too perpendicular, thus making the propelling force to act more in the direction of the perineum than in that of the outlet of the parturient canal.

(2) Where the pubic arch is too acute in its outline, thus preventing the head from filling the upper part of the arch, in which condition we have the force directed against the perineum with unusual energy. A narrow pubic arch is practically the same as a *long* symphysis pubis, and the head must go further down, in order that it may escape, than it would were the arch broad.

(3) A thickened state of the urethra and the subjacent parts has, curiously enough, been regarded as modifying the labor in the same manner as a narrow pubic arch. It certainly must do it only in a modified degree, if, indeed, it have a *noticeable* effect at all.

(4) Too little inclination of the pelvis, this anatomical peculiarity increases the risks to the soft parts, because of the liability to rapid labor.

(5) An excessive *width* of the perineum, the centre of it, consequently, receiving the force of the presenting part rather than directing it forward.

(6) Too *long* a perineum.

(7) *Rigidity* of the perineal tissues or of the vaginal orifice. The texture of the vaginal tissues, though thinner than the perineal, is at the same time less distensible. The *age* of the patient, too, if she be a primipara, may be calculated upon as predisposing to this rigidity, the condition of inelasticity being most common in aged primiparæ.

(8) If the tissues have been weakened by disease; also the presence of old cicatrices.

(9) Too much voluntary force exerted on the part of the patient.

(10) The use of ergot.

(11) The *sex* of child, too, may be regarded as a factor in calculating the probabilities of a laceration of the perineum; the birth of male children being attended with more danger to the soft parts of the mother, and especially if she be a primipara, because of the greater size of the male head. According to the observations of Clarke, of Dublin, the circumference of the male head exceeds the female by $\frac{3}{4}$ of an inch, and the length of the transverse diameter is $\frac{1}{4}$ of an inch longer. And that, as the order of labor rises in difficulty, the amount of male births rises in number." Then, under this same caption, I may include the commonly quoted cause, viz: "the disproportion between the size of fœtal head and the rima vulvæ," as well as the excessive length of the bis-acromial diameter, for the *head* may escape without producing a laceration, and the shoulder or elbow *produce* or *extend* one already commenced. Indeed, I think the shoulders, from their irregularity of contour, may, with propriety, be regarded as more formidable opponents to the integrity of the perineal tissues than the head itself. They have, however, the advantage of a previously dilated canal.

(12) Mal-presentation, as in face, when the mento-occipital diameter is made to extend the vulvar orifice at least $1\frac{3}{4}$ cm. more than in vertex presentations of anterior varieties.

(13) Mal-positions, as in posterior varieties of the vertex, where extension of the head occurs backward over the perineum. (Of course I allude to those cases where internal rotation forward has not occurred.)

(14) The awkward use of instruments. Awkward position of the patient, and the same may be added of the accoucheur. And lastly, but perhaps least cogently, is the idea in the mind of the physician (if he be young in practice), that "a certain number of perineums will have to be sacrificed anyhow."

Now, after even a brief consideration of the foregoing causes, some of which are entirely opposite in character, we may with safety conclude that no single line of treatment will be applicable to all cases, but that the "management" must be such as will meet the exigencies of each particular case under supervision.

And as the first pre-requisite of successful "preservation," I would consider a thorough knowledge of the anatomy of the female pelvis and its organs as most essential. And side by side with this topographical anatomy I would place a thorough and critical diagnostic examination.

The only safety is in *knowing*, and we can only know by an investigation of each and every case. We ought to know if the perineum be long or short, if there be much or little development of the parts that bound the vulvar orifice. If there be rigidity or relaxation. If tumefaction

or œdema exists. The *size* of the vaginal orifice. The persistence of the hymen. The condition of the vaginal walls, the presence of cicatricial tissues. If the bladder be distended or the rectum full. The condition of the pelvic walls and the dimensions of the pelvis as a whole, with the presentation and position of the fœtus. It seems to me the line of conduct is far plainer after coming into possession of these facts than before. In other words, the future of both patient and doctor is far safer.

And now, after being thus armed with a complete understanding of our case, we will often find that many of the so-called causes of laceration are removable, and that a portion of the remainder can be rendered innoxious.

(1) In this day and generation no perineum should be injured from the use of ergot. So long as the uterus is occupied by the fœtus, placenta, membranes, or even coagula, ergot is strongly counter indicated.

(2) The awkward position of the patient and physician is quite within control. In the second stage of labor the left lateral decubitus for the patient upon the right side of the couch, reckoning from the head of the same, makes her easy of access and places the attendant usually where he has the most ease of motion.

(3) Lacerations resulting from the *awkward* use of instruments are preventable in only one way, but the remedy is applicable to the physician and not to the patient.

(4) Too much voluntary force exerted by the patient is rarely a just excuse for a tear, since an anæsthetic has come to form an unforgetable article of the armamentarium. And while we can thus control voluntary effort with our anæsthetic, we have at the same time a powerful opponent to *rigidity* of tissue. And in this stage of labor I prefer chloroform to ether. I like, of course, to know that the condition of the heart and lungs is good, that no kidney trouble exists, and that there is no great probability of post-partum hemorrhage.

The condition of the rectum and bladder should *always* receive attention, no matter what the statement of the patient. A rectal enema of warm soap suds should be a matter of routine practice, if ever routine practice is admissible. The use of the flexible catheter during the second stage, even if not unduly prolonged, is good practice but not always easy. Of course this kind of management implies the early attention of the physician, and insures to the patient a great deal better service than many of them either appreciate or remunerate. But what shall we do to the *perineum*? Do *not* support it. Manipulations directed to the perineum destroy its integrity, and the best results follow support of the presenting part rather than of the perineum itself. With two fingers in the rectum you can have absolute control of the head after the mouth is accessible, and always should the presenting part be expelled in the *interval* of contractions. In many cases full control of the presenting part can be maintained by pressure upon it with the thumb and index finger, without resort to the rectal touch (which is always offensive to the patient). And at no time during the expulsion should we lose sight of the mechanical relations. If there be too much flexion favor the upward movement of the head toward the symphysis; this can best be accomplished from the rectum. Or if too early extension of the head occurs before relaxation be complete, favor flexion by pressure upon the presenting part backward toward the sacrum. "But if the axis of the fœtal cylinder is cutting the diameter of the vulvar circumference at a right angle then will the cylinder pass through the ring with least damage to its margins, and to push upward or backward would be to spoil the relations," and instead of giving intelligent assistance we would be substituting meddlesome stupidity. But what to do in those cases where a tear is inevitable? Then resort to the bilateral incision of the vulvar orifice. If the continuity of tissue must be destroyed control the locality, and as far as possible the extent, of the tear. These incisions should be made through the lateral margins of the orifice midway between the anterior and posterior commissures, and if the margins of the vaginal orifice form a constricting band over the presenting part, then the incisions should include the vaginal tissue also. Occasionally we need not include the vulvar tissue. A central tear of the perineum may commence as a tear of the vagina, but in the majority of cases the borders of both the vaginal and vulvar orifices need to be included in the tract of the bistoury or scissors whichever you may prefer to use.

The best made objections to these incisions is, that they do not always prevent a central tear, but if they save but fifty per cent. of the otherwise unavoidable central lacerations of the perineum they should not be abandoned. They are not painful if made during a contraction, and union without suture is more probable than in a central tear of the perineum, of the same length, because they can be made out of the reach of the action of the perineal muscles. And in conclusion, although the *title* of my paper does not *include* the treatment of lacerations when they have actually occurred, still I wish to record one more plea, and a positive one, too, in addition to the many already so well made, for the *immediate* repair of the injury. I quite fail to see why the repair is so often postponed. The benefits that accrue to the patient are incalculable; her consent, usually, easy to obtain; in fact, her morale at that time is very often better for the operation than at a subsequent period, while we have, naturally, all the attendant circumstances necessary for union (except the presence of the lochia). Then the sensibilities of the parts are reduced to a minimum, and an anæsthetic not always indispensable. So that we have an operation of comparative ease, which by delay is convertible into one both painful and tedious. So, in view of even these facts, I would *insist* that the *immediate repair* of lacerations of the perineum be regarded as part of the attending physician's *duty*, and the avoidance of it punishable, by at least, a *lower professional standing*.

Then followed a paper on "A Rare Case of Nervous Disease," by Dr. J. L. Stewart, of Erie, which was read by title. Then followed Dr. Levis' paper, by title, of which we give a short abstract.

The paper of Dr. R. J. Levis, on

Surgical Expedients in Emergencies,

presented some original resources in the absence of ordinary means and appliances.

The relief of an over-distended bladder he had effected by doubling a piece of common iron bell wire, and the blunt doubled end passed through the urethral tract, distending it and allowing the urine to pass between the wires.

A common rye straw, with its end wrapped with either thread or yarn, or tipped with sealing wax, or the stem of a common clay tobacco pipe, are efficient substitutes for the female catheter.

Venesection can be made easy and certain, with even a dull and blunt pocket knife, by first transfixing the vein with a fine sewing needle.

A number of ready and ingenious resources are given for the arrest of epistaxis and hemorrhage in general. A good tenaculum is extemporized from a fish hook tied to a pen-holder. A flannel bandage, cut bias, is sufficiently elastic to substitute the Esmarch bandage.

Expedients for ready fracture dressings are given, one of the best of which is the material of common palm leaf fans, split into fragments and bandaged around the limb. For a ready fixed dressing the ordinary sand-paper, softened in warm water, is recommended, the paper, sand and glue giving, when dry, the requisite stiffness and body to the splint.

Postural methods of treating fractures, as those in the vicinity of the joints, are referred to, and that of the clavicle by a brief recumbent position.

To open the mastoid cells in cases of abscess urgently threatening cerebral complication, he has effectively used a carpenter's gimlet.

Rectal injection by a hydrostatic column, with a long tube, is referred to; and also the distention of the lower bowels, in cases of invagination and impaction, by carbonic acid gas and water from the ordinary mineral water bottle, or the syphon attached to a rectal tube.

Stramonium is recommended for ready use in iritis and traumatic injuries of the eye when atropia is absent.

For simple, cheap and effective antiseptics, sulphurous acid, alcohol, whisky, and the salts of iron, copper and zinc, may well substitute carbolic acid.

After which Dr. William S. Roland, of York, read a paper on

Hæmaturia.

This term is of Greek origin, and means bloody urine, or voiding of blood by urine, and like other hemorrhages, it may be active or passive, and may come from the kidneys, ureters, bladder, prostate gland or urethra. There can be no difficulty in detecting blood when found in the urine, but the question of practical import is, to determine from whence does it come? and here, in this connection, I quote from an article by Dr. F. K. Bailey, found in the Philadelphia Medical and Surgical Reporter, Vol. xxvi, page 321, as follows: "Watson says 'Hæmaturia, strictly idiopathic, must be very rare.' Aitken only alluded to it incidentally in connection with albuminuria. Cullen remarks 'that neither he nor any of his friends had ever met with an instance.' Wood says 'It is by no means common, except as an attendant upon inflammation of some portion of the membrane lining the urinary passages, and even under these circumstances, is seldom so considerable, as to claim particular attention.' Eberle gives some excellent diagnostic circumstances which will guide us in giving locality to the origin of the blood voided from the bladder. Dunglison points out also the principal diagnostic marks to aid us in the study of cases which may come under our notice. Barclay, in his work on Diagnosis, specifies many points to enable us to determine the origin of the blood, but says 'These observations all tend to show that hæmaturia is almost constantly a symptom, though a casual one, of disease in some portions of the urinary apparatus.'" I further quote from Sir Henry Thompson's Lectures on Diseases of the Urinary Organs, as follows: "What is the source of it? Now, it is often not an easy thing to state at once what point of that long and complicated organic apparatus which commences in the Malpighian corpuscles, and ends at the external meatus, is the source of the blood in question, for sometimes it is exceedingly difficult to define its source. If the hæmaturia is the result of inflammation, there will be general fever denoting its presence; if produced by slow organic change, there will be history of failing health, and probably urine changed in quality, otherwise than by mere admixture of blood." Von. Ziemssen and other writers tell us that hæmaturia is sometimes the first symptom of renal cancer, that it may sometimes be developed without any preceding pain, and it is often impossible to make much out of this symptom, if it is quite isolated, though a renal hemorrhage arising without any external cause, and running its course without pain, is always to be looked upon with suspicion; another, perhaps more reliable, sign, is the discovery of a tumor, which makes the diagnosis passably clear. Taking the best medical authorities as our guide, we infer that primary cancer of the kidney is considered a rare affection, and when it does occur, is usually confined to one kidney, the right one being most frequently attacked; the kidney may not be necessarily much enlarged, and the disease may run its course without giving any very prominent symptoms on which to base a satisfactory diagnosis; pain in the region of the loins may sometimes be the first symptom, and that may not denote much significance. The most important symptoms to be considered are the renal tumor and the hæmaturia; the latter may be noticed at any early stage of the disease, but it is only the attending physician who has made himself familiar with the experience of others, and who has the opportunity of seeing the patient during the entire course of the disease, noting in time a tumor, and the successive appearance of hæmaturia, and all the other well marked symptoms that are daily brought under his notice, who will be prepared to make a more easy and reasonably correct diagnosis than one who is not familiar with, or who has only a partial knowledge of the case.

The above observations have been suggested by the following case, which came under my special notice and care:—

Dr. T. L. C., a retired physician, aged 74 years,

called on me at my office, in the latter part of March, 1881, and stated that he was troubled with hæmaturia, and in answer to my question, he said "it had troubled him more or less at various times for the preceding eighteen months, and perhaps longer, but the discharge was usually so slight as not to cause him any uneasiness, but lately the flow of blood was increasing, and beginning to alarm him, that he had taken quinine and tr. mur. iron, but the discharge still continued, though he really was not suffering from it, and thought he was gaining flesh. The Doctor, at that time, presented a fine personal appearance, bearing the impress of a well preserved gentleman; habits all good, and, temperate in all things, he looked the picture of perfect health and bodily strength, and he could not remember of ever having met with an injury at any time, nor could he assign any cause for his trouble. I suggested to him, to try fluid ext. of ergot; a few days afterwards he reported that the ergot acted like a charm in arresting the bloody discharges. About two weeks thereafter he again reported that the flow had returned, and was very bad. I then said to him that I thought the trouble was in the bladder, and advised him to continue the ergot and drink flaxseed or elm tea, which again had the effect of much diminishing, or nearly altogether arresting, the discharge. Some time afterwards, about the middle of May, the Doctor reported that the disease had again broken out, and was very much more obstinate and lasting longer than the other spells; that he thought the discharges of blood on some occasions averaged a pint and more a day. He now, for the first time, complained of pain, and a sensation of weight in the lumbar region, also pain and burning at the anterior extremity of the urethra. I desire here to state, that I never, for a day, lost sight of the case, from the time of his first reporting himself to me, but was in daily intercourse and consultation with him, and during all this time, of about seven weeks, he was treated with ergot, hamamelis, gallic acid, matico, acid. sulph., quinine, tr. mur. iron, etc., at such times and doses as the nature of the case seemed to indicate; he was also cupped and blistered over the lumbar region, and while he seemed to derive some benefit from the treatment, the discharge continued with short intervals, more or less, every day, and he was never entirely free from it for perhaps more than one or two days at any time.

On the 25th of May I informed the Doctor that I now had reasons for changing my opinion as to the location of his disease, and that I believed it was located in the right kidney, that it was alarming in its nature, but not necessarily immediately fatal, and suggested a consultation, to which he readily assented, and said we would go to Philadelphia; accordingly on the next day we went to Philadelphia and saw Dr. J. H. Brinton; the Doctor made a thorough and searching examination, but failed to discover any signs of calculi, and said he did not believe there was any stone there. I then said to Dr. Brinton that the trouble, in my opinion, was not in the bladder, but was in the right kidney; he seemed to think, and so expressed himself, that possibly I might be right, and said he had no suggestions to make regarding treatment, other than what I was doing. On the 31st of May I wrote the following in a letter to Dr. Brinton: "Will you confidentially give me your opinion as to the character of our friend's disease; I have partly formed an opinion, but dread to name it. I hope I am wrong, and will most gladly accept any other name; there has at no time been such prominent symptoms as to lead me to think of diagnosing Bright's disease or calculi, but I fear cancer of the right kidney." To which the Doctor, the next day, replied as follows: "I am afraid your diagnosis is correct; our friend is evidently suffering from hæmaturia, and his face has a dreadfully cachectic look; of course we cannot tell the exact nature of his trouble. There are hardly the symptoms of renal calculus, so that we must look further. I fear that he will not improve, and I should doubt any therapeutic agent doing him much good."

During the month of June there was at no time any marked improvement in the condition of the patient; when there was a diminution in the blood discharges, there seemed to be an increase in the pain, and at times very severe, involving the loins, hip, thigh and leg of right side; there was generally obstinate constipation with occasional diarrhœa. On the 27th of May and 22d of June he went to Atlantic City, in hope of being benefited by the change, but in each instance, after a few days' trial, he was obliged to return home, always feeling worse for the trip.

About the middle of July Dr. A. R. Blair, of York, was called into the case, and he agreed with me fully in my diagnosis. The same treatment was continued, but there was no change for the better; the pains were constant and severe, and the desire to pass urine was frequent and painful; sometimes the flow would suddenly stop, and after numerous hot water applications over the bladder, large clots of blood would be forced out, and then, to afford relief to his sufferings, large doses of opium were freely administered. Œdema in the right limb now set in, and there was also evidently a tumor in the region of the right kidney, which had been previously noticed. On the 27th of August the right thigh and leg measured in circumference two and one-half inches more than those of the left side, and on the 30th the dimensions had increased to four and one half inches, and he now complained, in addition to his other painful afflictions, of an agonizing pain, locating it about the last lumbar vertebra, over which, after tr. iodine and other local applications, there was applied a compress, wet with a solution of atropia, and covered with oil silk, which he thought afforded some temporary relief. From this time on to about the middle of September, the blood discharges diminished, the pains were not so severe, and the œdema was getting less; his rest was not so often disturbed, and the anodyne doses were reduced; but he would take very little nourishment, and was all the time bed-fast, so that we did not feel much encouraged in hope of any permanent improvement. On the 20th of September the volcano again broke forth in great fury. The limbs of the lower extremity, left side, now commenced to fill, and soon were as full as the right ones had been; the discharges of blood were large and frequent, difficult and painful, the pains in the

back and along the course of the ureters and running down both limbs were alarmingly increased. The quinine was continued and stimulants at regular intervals were allowed. Opium was freely administered. This plan of treatment seemed now to afford the only relief for his intense sufferings. During part of intervening period up to October 21st he seemed at times to suffer less pain, the œdema was less, being about the same in both limbs, which had been kept down with bandages. From this time on there was no appetite, memory tardy, mind occasionally for a short time wandering, and when asked what he was talking about said they were only dreams; he was nervous and weak.

October 22d. Is getting weaker all the time, but rests quietly, except when obliged to micturate, which is now very frequent and painful; the desire coming on almost every half-hour; when not under the influence of the opiates, he is not disposed to talk, but readily answers all questions, when roused up; pulse running high and respiration is being interfered with; tumor in right side increasing, and discharges chiefly blood. Authorities tell us "In malignant renal tumor, blood may be found in large quantity at times; the rapidity of growth, and the size attained, are marked characteristics of the disease."

From the 23d to the 28th of October there was a continuation and aggravation of all the symptoms, until he was relieved of his sufferings, by death, which occcurred on the 28th, at 11 A. M. The following is the analysis of the urine, examined June 23d, 1881:—

Physical and chemical characters.—Color and appearance smoky; odor normal; reaction slightly acid; sp. gravity, 1.023; albumen; nitric acid and heat tests, separately and combined, give about ¼ albumen; ring tests give albumen. Sugar, none detected; deposit; after standing 12 hours, there is a dark red deposit, not very abundant.

Microscopical appearance.—Crystals, none.

Anatomical elements.—Field full of red globules; very abundant; also some white globules.

Casts.—No casts found in 3 slides examined; epithelial cells from bladder, ureter and kidney.

Examined August 19th, 1881.

Appearance smoky; reaction Acid; sp. gravity 1.018; albumen test gives about 1-5 bulk; sugar none; deposit red, after standing over night.

Microscopic appearance.—A few phosphates and oxalates; blood; some red corpuscles, large number of white or pus corpuscles; casts none; epithelial cells rather abundant.

During the entire course of the disease, continuing about seven months from the date when I was first consulted, the patient, at all times, except when suffering pain, was calm and resigned; and as to his condition, he did not at any time speak of, complain, or refer to the nature of his affliction.

There, unfortunately, was no autopsy, and hence the true character of the disease must remain obscure forever; nevertheless, my diagnosis shall remain unchanged.

Dr. Henry H. Smith, of Philadelphia, offered the following resolutions:—

Resolved, That this Society *re-affirms* its adherence to the code of ethics as adopted by the American Medical Association.

Resolved, That the delegates of this Society to the meeting of the American Medical Association in 1882, be instructed to enter an early protest against the admission to the Association of the *delegates* of any State or other Society that objects to and does not observe said code of ethics in all its branches. This resolution was seconded by Dr. John L. Atlee, of Lancaster, who said he would have gone to California to second the resolution of Dr. Smith.

Similar resolutions unanimously passed by the Philadelphia County Medical Society were read, as referred to the State Medical Society. Drs. E. P. Allen, Bradford Co., H. H. Smith, A. Hewson, Philadelphia, Jackson, of West Chester, Varian, of Titusville, and others, spoke concerning Dr. Smith's resolution, which was unanimously adopted.

The Society then finally adjourned, loud in their expressions of praise of the hospitality of the profession and citizens of Titusville. The delegates were all entertained with the most sumptuous hospitality in private families, while general receptions were given by Drs. Varian and Moody (who were untiring in their efforts to entertain), by the Mayor of Titusville and many others. The Society meets next year at Norristown.

Annual Meeting of the Sanitary Council of the Mississippi Valley.

The annual meeting of this Council was held in Cairo, Illinois, April 19th and 20th, 1882. The president, Dr. J. J. Speed, of Louisville, Ky., was in the chair, and Dr. John H. Rauch, of the Illinois Board of Health, acted as Secretary.

The New Orleans Medical and Surgical Association was admitted a member of the Association, and Dr. L. F. Salomon took his seat as its accredited representative. It was decided that after this year the fee of membership should be five dollars per year from all organizations belonging to the Council. The committee on river inspection by the National Board of Health reported as follows:—

Mr. President and Gentlemen:—The committee to whom was referred resolutions adopted by the State Board of Health, resolutions adopted by the Michigan Board of Health, executive correspondence relative to Mississippi quarantine stations; presented by Dr. Salomon, of New Orleans, resolutions presented by Dr. G. B. Thornton, of Memphis, and a communication from the National Board of Health, relative to river inspection service, respectfully return above mentioned papers, and recommend the adoption of preambles and resolutions as follows:

WHEREAS, The prevention of the introduction of yellow fever into the United States is a subject of national importance, and

WHEREAS, We believe that there is no safety if an infected vessel is allowed to enter the Mississippi river;

Resolved, That in the opinion of this council it is proper for the Louisiana Board of Health to ask, and it is the duty of the National Board of

Health to continue to give, aid in the prevention of the introduction of yellow fever into the Mississippi valley;

Resolved, That it is the duty of the National Board of Health to aid in the prevention of the introduction of yellow fever and to give accurate information to all States interested in the sanitary condition of the Mississippi valley.

1. An inspector of the National Board of Health should be placed at Eadsport, to act conjointly with the officer of the State Board of Health in securing the exclusion of infected vessels from the Mississippi river, and in notifying such vessels that they must be thoroughly disinfected. (2) That a representative of the National Board of Health shall be stationed at the Mississippi river quarantine stations. (3) That it is the duty of all health authorities in the Gulf States, promptly to communicate to the National Board of Health any and all possible information relative to the occurrence of yellow fever, or of a case which may be suspected to be yellow fever, and in every possible way to aid the National Board of Health to perform its duty in giving accurate information for the guidance of State and other Boards of Health throughout this country.

Resolved, That this Council, duly appreciating the utility of an efficient inspection service during the summer months, for the Mississippi river, and for railroads having their terminus on the Gulf coast, and also the efficiency and moral effect of such service as was maintained by the National Board of Health during the past three summers, do now respectfully request the National Board of Health to reëstablish that inspection service in the Mississippi river for the approaching summer—that is to say, until the middle of October.

Resolved, That the National Board of Health be requested to place on duty at New Orleans, and such other southern ports as may be deemed necessary, an inspector or inspectors, whose duties shall be to supervise the shipment, by river or rail, of all goods, merchandise, baggage, etc., and to inspect persons when necessary, and to advise by telegram, the secretary of each Board of Health interested in the matter, whenever such goods or persons are believed to be infected, or in anywise dangerous to the public health.

Resolved, That the secretary of this Council be instructed to transmit to the Secretary of the National Board of Health a list of the health organizations forming this Council.

WHEREAS, Measures for the prevention of the introduction of disease from foreign countries into the United States are of national importance, affecting not only the seaboard and Gulf states, but also the interior, as evidenced a few years ago by the widespread disaster from yellow fever, and recently by the widespread diffusion of smallpox, and,

WHEREAS, Hitherto the efforts of State and local health organizations have proved inadequate in giving needed protection;

Resolved, That in the judgment of this Council such measures shall be taken by the government as will most effectually prevent the introduction of contagious and infectious diseases into the United States.

Resolved, That the work of the National Board of Health and its objects meet the cordial approval of this Council, and this Council respectfully and urgently requests the Congress of the United States to make the necessary appropriation to enable the National Board of Health to continue its work.

Committee: HENRY B. BAKER, DAVID P. HADDEN, GUSTAVUS DEVRON.

A special committee was appointed, to which was referred certain papers and resolutions relative to inspecting and quarantining of immigrants, to prevent the introduction and spread of smallpox. This committee submitted a report recommending that immigrant inspection and means for protection against the smallpox for the year 1882 should be commenced May 1st, and that all the State and local sanitary organizations interested should unite, and should coöperate with the National Board of Health in order to accomplish the objects desired.

It was also resolved that this Council deems it important that clothing and baggage on board vessels and cars coming from places infected with smallpox should be disinfected, even though, by reason of vaccination, no person on board such vessels or cars contract the disease.

Upon motion of Dr. R. W. Mitchell, a committee was directed to be appointed, which shall inquire into what effect, if any, the recent inundation of the Mississippi river may have on the general healthfulness of the people of the Mississippi valley, and report at next annual meeting.

Drs. Thornton, Stephens, Solomon and Farquharson were appointed as such committee.

The following officers were then elected for the ensuing year: President, Dr. G. Devron, of New Orleans; Vice President, Dr. D. B. Hillis, of Iowa; Secretary and Treasurer, Dr. J. H. Rauch, of Illinois. The Executive Committee of the Council was requested to call a meeting at an early date next year, if deemed necessary. After an address by the President on "The Necessity of National Control of the Prevention of the Introduction of Yellow Fever and Smallpox into the United States," the Council adjourned.

MARRIAGES.

ELDRIDGE—HOUGH.—May 10th, in Elizabeth, N. J., by the Rev. L. P. Hornberger, of Philadelphia, Mr. John D. Eldridge, and Miss Ella L., daughter of Dr. T. L. Hough, all of Elizabeth, N. J.

NEVILLE—BROWN.—Wednesday evening, March 22d, 1882, at Chambers Presbyterian Church, by Rev. J. M. P. Otts, W. H. H. Neville, M.D. and Miss Lida T., daughter of E. D. Brown, all of Philadelphia.

PETTIGREW—HUTCHISON.—At the residence of the bride, May 10th, by the Rev. W. G. Reed, Samuel Pettigrew, M.D., of Du Bois Pa., and Emma Louise Hutchison, of Springdale Pa.

DEATHS.

BROCK.—At Morgantown, West Virginia, April 24th 1882, Hugh W. Brock, M.D., Professor in West Virginia University.

GARRISH.—On Tuesday, April 25th, J. Pool Garrish, Jr., M.D., at his residence, No. 66 West 46th Street, New York.

GILBERT.—At Gettysburg Pa., April 20th, 188?, of consumption, Dr. John E. Gilbert, aged 29 years and 9 months.

HOFFMAN.—At Reading, Pa., on April 30th, Dr. James M. Hoffman.